LOSS BY EXCHANGE;

OR THE

DEPRECIATION OF SILVER,

AND THE

EFFECTS OF ITS FURTHER DEPRECIATION

ON THE

FINANCES AND THE MATERIAL PROGRESS

OF

INDIA.

SIMLA:
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ERRATA.

Page.	Para.	Line.	
14	25	5	*For* "thrown" *read* "throw"
(Appendix)—			
18	49	4	*For* "1867" *read* "1857"
19	51 (Cl. I)	9	*For* "fall" *read* "rise"
29	2	...	(Table). *For* "93·807" *read* "98·807"
58	...	...	Entry 38, line 2. *For* "1856" *read* "1866"
87	63	5	*Add* "See paragraph 109"
90	68	...	*For* "880" *read* "80"
94	78	22	After the figures *add* "Of the 11 millions of gold sent to Germany, nearly the whole was afterwards drawn back to France by land. *See paragraph* 108.
99	94	...	1st section 3rd line. *For* "full" *read* "gold"
103	109	5	*Continue.*—"Indeed, without the simultaneous issue, in January 1876, of the new gold coinage and the new silver tokens, the German Government cannot get possession of the 52 millions of old silver coinage which will have to be thrown on the market in 1876 and later years."
106	119	1	*Dele* "in".
116	146	...	For the equivalent in sterling, of the following, *read*— 100 francs piece = £ 3-19-3·6 50 „ „ = £ 1-19-7·8
130	1	1	*For* "was" *read* "were"
132	11	...	(Last sentence in the paragraph) after "price" *add* "of Indian exports"
139	50	7	*For* "her" *read* "India"
150	8	1	*For* "7" *read* "8"
160	34	...	(Last sentence)—*continue*—"and the annual average of the net imports from silver-producing countries was 7·971 millions, from 1870 to 1874, against 5·893 millions from 1859 to 1865."

LOSS BY EXCHANGE.

ABSTRACT.

		Paras.
1.	Detail of the Appendices and Tables which are submitted ...	1
2.	Statement of results of the foreign trade of British India, shewing the balance of trade, its settlement by the Home Bills on India, by imports of treasure, and in other ways, and shewing the rates of exchange, in groups of years from 1850-51 to 1874-75 ..	2 & 3
3.	Restricted importation of treasure during the period of low exchange since 1870-71, and a still more restricted coinage in that period ...	4
4.	The portion of the foreign trade which China settles direct with India, distinguished from the rest of the foreign trade, which, substantially, is settled through Great Britain: It appears that when the Secretary of State's bills on India did not exceed 35 per cent. of the exports included in the latter trade, the exchange and the price of silver were high; since they exceeded by 40 per cent., the exchange and the price of silver have been low	5 to 8 & 15
5.	The apparent balance of trade in favor of India is exaggerated from the conversion of the amount of exports into sterling at 2 shillings the rupee, whereby they are stated at a much larger sum than foreign countries have to pay, while the imports are shewn at nearly their true value	9 & 10
6.	The large increase of Home Bills on India has arisen from cessation of borrowing in England and of payments of Guaranteed Railway capital into the Home treasury, and from an increase of payment of gross guaranteed interest	11 & 12
7.	The rate of exchange on the Secretary of State's bills is affected 1st by the price of silver in London, 2nd by the cost of its transmission to India, 3rd by seignorage on coining it in India, 4th by the commercial demand for the bills. The effect of the third cause is constant, the rate of seignorage having been uniform throughout the period from 1853-54 to 1874-75; and eliminating the effect of the first cause, in a way which is explained, it appears that the rate, as affected by the commercial demand for the Secretary of State's bills and by the cost of sending silver to India, has fallen by about 1¾ per cent.	14 to 16
8.	This decline in rate is owing entirely to the diminished cost of sending silver to India; whereas that cost was 3¼ per cent. in 1862-63, it is now 1½ per cent. Exporters from India and importers in England have secured 1¾ out of the 2 per cent. saved, while the Secretary of State, exporters in England, and importers in India, have benefited by only the remaining ¼ per cent. This unequal division of the saving was possible, because India has a silver instead of a gold currency	17, 19, 20
9.	Had seignorage been increased by 2 per cent. when the cost of sending silver to India was reduced to that extent, the latter saving would have wholly accrued to the Secretary of State, and to importers in India and exporters in England	18
10.	As the rate of exchange depends partly on the amount of bills sold by the Secretary of State (entry 4), expedients suggested for reducing their amount	21
11.	And in so far as the exchange has been depressed by the fall in the price of silver, the evil effect can be removed by increasing seignorage, by the percentage of difference between the price of silver in, say 1860, and in the present day. This measure considered under the three aspects of 1st, its efficaciousness, 2nd, its expediency, 3rd, any limit to the increase of seignorage ...	22 to 30
12.	A seignorage of 10 per cent. is that which Germany has fixed on the silver coins for the new German coinage; and a still higher seignorage has been obtained in England on the coinage of shillings, without tempting spurious coinage. Accordingly, even should the price of silver fall below 54 pence, and even to a rate which would	

ABSTRACT.

		Paras.
	compel the raising of seignorage much beyond 10 per cent., even then, the point of danger will not have been reached,—silver, at 56 pence an ounce yielding a seignorage on the English shilling of nearly 18 per cent. But still, it may be well to keep much within safe limits, and to this end the Government might declare a new gold coin to be legal tender concurrently with the rupee, as a temporary measure, and as one preliminary to the adoption of a single gold standard	29 to 31
13.	By the following means, *viz.* :— 1. Gold of legal tender, to exchange with the existing rupee at a relative value of 1 to 15·5867. 2. Exemption of the gold coin from seignorage. 3. Increase of seignorage on silver coin, from 2 per cent., the present rate, to 10 per cent. the depreciation of silver in India, which has already taken place, would be corrected; and if there be any further considerable fall in its price abroad, the Government would be enabled, on this plan, to apply additional remedies which would prevent a depreciation of the currency in India from the fall of the price of silver elsewhere	32 to 37
14.	The measure sketched in entry 13 would bring gold into the country, in preference to silver, would prevent the exportation of the rupees now in circulation, and would prevent the importation of silver with the view of exporting the gold which will have been brought into the country	38 & 39
15.	Hence, there would be leisure for spreading the transition from a silver to a gold standard, over a convenient period; though, at the same time, the sooner the measure is ordered, and the quicker it is completed, the better	40
16.	The expense and difficulty of the measure will depend on the amount of silver coinage in circulation, the portion of it which would have to be replaced in gold, the time which the replacement or substitution would take, the expense of eventually withdrawing the balance of the silver coinage which is not to be replaced by gold, and the substitution of a silver token coinage for it, the profit on reissuing token or debased silver coinage in lieu of the withdrawn silver coinage of legal tender, and the extent to which this profit will cover the expense of the token coinage, and of selling the silver which may be replaced by a gold currency ...	41
17.	The silver currency in India is probably over estimated if it be assumed at 130 millions sterling	42 to 44
18.	Sketch of the measures by which there could be provided a gold currency of 60 millions and a silver token coinage of 100 millions sterling at an annual gain on the coinage operation, besides a considerable permanent saving on loss by exchange	45 to 66
19.	Additional advantages, financial and other, which would accrue ...	67 to 73
20.	Certain objections to a gold currency noticed	74
21.	Summary of the substance of this paper and of its appendices, giving the general scope of the argument for altering to a gold standard and demonetising silver	75
22.	Preceding considerations enforced by the examples of the statesmen of enlightened European Governments.	76 & 77

LOSS BY EXCHANGE.

Owing to the very serious and still increasing loss by exchange, it may be of service to place before the Secretary facts and figures which he has not the leisure to collect from volumes of statistics, and from other sources, or to arrange in a way conducive to an intelligent review of them.

The following statements are accordingly submitted:—

TABLES.

1. *Foreign trade* of British India (*Merchandise*) in each 1850-51 to 1874-75, distinguishing the amounts for China and the Eastern Settlements from the amounts for other foreign countries.

2. *Treasure* imported into and exported from India to and from foreign countries, in each year from 1850-51 to 1874-75, distinguished as above; also, amount of Home Government's bills on India, the net capital paid into the Home Treasury by Guaranteed Railways, and the amount borrowed in England.

3. *Annual average* of *gross* imports and exports of merchandise and treasure, of Home Government's bills on India, net payments of Railway Companies into the Home Treasury, and borrowings in England, for certain groups of years, in the period from 1850-51 to 1874-75.

4. *Annual average* of *net* exports of merchandise and net imports of treasure, and of Home bills on India, for groups of years, in the period from 1850-51 to 1874-75.

5. *Gold and Silver*, imports, exports, and net imports of treasure in the foreign trade of British India, and amount of gold and silver coinage, in each year from 1850-51 to 1874-75.

APPENDIX.

A.—Currency in India, in Great Britain, and in countries which have changed or are about to alter their standard of value, or to resume specie payments.

B.—Resumption of specie payments in the United States.

C.—Annual production of gold and silver, the demand for gold, and the depreciation of silver.

D.—The effect upon the foreign trade of India of the fall in the price of silver.

E.—The trade of British India and of the United Kingdom.

F.—Miscellaneous extracts: *viz.*, obligations of Government under the permanent settlement; seignorage.

2. Some of the results are as follows :—

Totals for the years	No. of years in each group.	Merchandise. Imports.	Exports.	Excess of exports.
		£ Millions.	£ Millions.	£ Millions.
I.—				
1850-51 to 54-55	5	57·736	96·730	38·994
1855-56 to 57-58	3	43·417	75·833	32·416
1858-59 to 61-62	4	91·808	127·111	35·303
	12	192·961	299·674	106·713
II*a*.—				
1862-63	1	22·632	47·860	25·228
1863-64 to 65-66	3	84·896	199 143	114·247
1866-67	(11 mos.)	29 039	41·860	12·821
1867-68-69	2	71·696	103·936	32·240
	7	208·263	392·799	184·536
II*b*.—				
1869-70-71	2	66·342	107·803	41·461
1871-72	1	31·084	63·186	32·102
	3	97·426	170·989	73·563
II*c*.—				
1872-73-74	2	63·855	110·189	46·334
	5	161·281	281·178	119·897
Total of II	12	369·544	673·977	304·433
1874-75 (12 months)	1	35·967	56·317	20·350

3. Some of the more striking results of the foregoing table are as

	12 years from 1850-51 to 1861-62.	12 years from 1862-63 to 1868-69, 7 years.	12 years from 1869-70 to 1873-74, 5 years.	Total for 12 years.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.
Net exports of merchandise ...	106·713	184·536	119·897	304·433
Net imports of treasure ...	107·586	120·168	33·372	153·540
Net imports of gold	90·895	44·922	15·369	60·291
„ of silver	76·700	75·253	17·991	93·244
Silver coined	78·781	60·233	17·233	77·466
Secretary of State's Bills on India...	23·011	42·288	52 959	95·247
Exchange on India	23 29/40 to 24 1/4	23 1/16 to 23 5/8	23 1/16 to 22 1/2	.....
Total imports, merchandise ...	192·961	208·263	161·281	369·544
„ exports „ ...	299·674	392 799	281·178	673·977
Grand Total ...	492·635	601·062	442·459	1,043·521

Treasure.			Net Imports of treasure.		Silver coined.	Secretary of State's bills on India.	Average rate of Home bills on India. Per Rupee.
Imports.	Exports.	Excess of imports.	Gold.	Silver.			
£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	Pence.
22·595	5·265	17·330	5·386	11·923	18·994	16·854	23 3/16
41·530	2·676	38·854	7·381	31·487	30 304	4·933	24 1/4
54·803	3·401	51·402	18·128	33·290	29·483	1·226	Nominal.
118·928	11·342	107·586	30·895	76 700	78·781	23·011	
20·509	1·111	19·398	6·848	12·550	9·251	6·642	23 7/16
70·883	4·881	66·002	24·463	41·545	36·343	22·735	23 3/8
13·237	2·432	10·805	3·842	6·963	6·119	5·068	23
26·931	2·968	23·963	9·769	14·195	8·520	7·843	23 1/8
131·560	11·392	120·168	44·922	75·253	60·233	42·288	
19·400	3·263	16·137	7·878	8·260	9·192	15·424	22 13/16
11·574	1·476	10·098	3·565	6·520	1·690	10·310	23 1/8
30·974	4·739	26·235	11·443	14·780	10·882	25·734	
10·349	3·212	7·137	3·926	3·211	6·351	27·225	22 1/2
41·323	7·951	33·372	15·369	17·991	17·233	52·959	
172·883	19·343	153·540	60·291	93·244	77·466	95·247	
7·823	1·625	6·198.	1·873	4 324	4·897	11·812	

follows :—

	With a total trade (merchandise).	With an excess in exports over imports (merchandise).	There was a net import of treasure.	Of which there was coined.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.
In the first period of 12 years	493	106·713	107·586	78·781 or 3/4ths
In the second period of 12 years ...	1,043	304	154	78
In second half of second period. (1869-70—1873-74)	442	119	33	17
In 1872-73-74 (2 years)	174	46	7	6 1/2
In 1874-75	92	20	6·2	4·9

4. Of £4·32 millions (net) of silver imported in 1874-75, about £1,200,000 was silver of the German Government imported into Calcutta for the purchase of bills drawn on London against exports of produce. The amount of the similar importation of Germany's silver into Bombay is not known, but judging from the total imports of silver into Bombay it must have been inconsiderable. A very great part of the gold and silver returns, for excess of exports over imports of merchandise, consists of re-payments for Malwa opium, and for cotton from Berar, the Nizam's territory, and Guzerat, which get absorbed in the native currency of Central India and Hyderabad, or pass to cotton cultivators in British Guzerat in the form of gold. There is also a demand for gold in Southern India. This is why much of the treasure imported does not pass into the Government mints. Still the facts remain that in the second period of 12 years, with a total trade nearly double, and with a net export of merchandise nearly treble, the amounts in the first period of twelve years, the silver coinage in the two periods was about the same, *viz.*, 78 millions in each period; also that, although, out of a total trade of 1,043 millions (merchandise) and a net export of 304 millions, in the second twelve years, more than one-half, *viz.*, 616 millions out of 1,043 of total trade, and 165 millions out of 304 of net exports, was contributed by the last four years of the twelve, yet the additional coinage in those four years was only 23½ millions out of a total coinage of 78 millions in the twelve years.

5. The third fact brought out in the table in paragraph 2 is that the imports of treasure into India were large in the years down to 1867-68-69, when the exchange in England upon India was high. This only illustrates the axiom that a country exports bullion only when the exchange is high, or adverse to remitters in it.

6. Two more points are suggested by the table in paragraph 2, *viz.*, the growth of the export and import trade, and of the Secretary of State's bills on India; but these are better illustrated in the following table, *viz.*:—

MERCHANDISE.

	Imports.			Exports.			Home Drafts on India.	Home Government's rate for bills on India. Per Rupee.
	Foreign Countries, except China and Eastern Settlements.	China and Eastern Settlements.	Total.	Foreign Countries, except China and Eastern Settlements.	China and Eastern Settlements.	Total.		
	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Pence.
	£	£	£	£	£	£	£	
1850-51 to 1854-55 Annual Average	10·252	1,295	11,547	11,442	7,898	19,345	3,371	23 2/16
1855-56 ...	12·683	1·261	13·944	15·534	7·505	23·039	1·484	24 1/8
1856-57 ...	13·166	1·029	14·195	16·949	8·389	25·338	2·820	24
1857-58 ...	13·761	1·517	15·278	16·672	10·784	27·456	·629	24 1/2
Annual average	13·203	1·269	14·472	16·385	8·893	25·278	1·644	
1858-59 ...	19·641	2·088	21·729	17·374	12·489	29·863	·026	26 } Nominal.
1859-60 ...	22·817	1·448	24·265	16·830	11·130	27·960	·005	... } Nominal.
1860-61 ...	21·727	1·767	23·494	20·407	12·564	32·971	·001	... } Nominal.
1861-62 ...	20·612	1·708	22·320	24·659	11·658	36·317	1·194	.. } Nominal.
Annual average	21·199	1·753	22·952	19·817	11·960	31·777	·307	
1862-63 ...	20·513	2·119	22·632	34·205	13·655	47·860	6·612	23 1/8
1863-64 ...	25·119	2·027	27·146	53·191	12·434	65·625	8·980	23 7/8
1864-65 ...	26·033	2·118	28·151	55·258	12·769	68·027	6·789	23 1/2
1865-66 ...	27·788	1·811	29·599	51·752	13·739	65·491	6·966	23 3/4
Annual average	26·313	1·986	28·299	53·401	12·981	66·382	7·578	
1866-67 ...	27·293	1·746	29·039	29·657	12·203	41·860	5·068	23
1867-68 ...	33·522	2·184	35·706	35·152	15·722	50·874	4·137	23 1/8
1868-69 ...	33·756	2 234	35·990	39·960	13·102	53·062	3·706	23 1/8
Annual average	33·639	2·209	35·848	37·556	14·412	51·968	3·921	
1869-70 ...	30·459	2·469	32·928	38·753	13·718	52·471	6·980	23 1/4
1870-71 ...	31·119	2·295	33·414	41·450	13·882	55·332	8·444	22 7/8
1871-72 ...	28 974	2·110	31·084	47·303	15·883	63·186	10·310	23 1/8
Annual average	30·184	2·291	32·475	42·502	14·494	56·996	8·578	
1872-73 ...	29·243	2·018	31·261	41·198	14·030	55·228	13·939	22 3/4
1873-74 ...	30·449	2·145	32·594	41·515	13·446	54·961	13·286	22 1/4
1874-75 (12 months) ...	...	...	35·967	...	...	56·317	11·812	22 1/4

Of the total trade of British India, that with the Persian Gulf and some minor places, and a portion of that with China and the Eastern Settlements, are, in the ultimate result of transactions, settled by those countries direct with India by importations of bullion; whilst the balance of the remaining trade is that which, substantially, is settled by the United Kingdom by Secretary of State's drafts, &c., and by importations of treasure. The balance of trade with the Persian Gulf, &c., may be roughly assumed as about equal (within £500,000 or £600,000) to the value of Government stores and of railway materials which, as being paid for by the Secretary of State's drafts, have to be deducted from the imports from the United Kingdom, &c., that are set against exports thereto. On the other hand, the net exports to the Persian Gulf, &c., have to be deducted from the exports which are set against the imports from the United Kingdom, &c. The one item almost neutralises the other, at least for the present purpose. Accordingly, the columns for foreign countries, except China and Eastern Settlements, in the table in the preceding paragraph, shew, with fair approximation to accuracy, the trade of which the balance is settled by the United Kingdom, except the portion of the China trade which is similarly settled.

7. England, for herself and the United States, settles part of their debt to China by buying the Secretary of State's bills on India, and remitting them* to China;—the latter country sets off those bills against her debt to India, and settles the balance of the debt by remitting bullion. Hence, if, from the excess of Indian exports to China over imports thence, there be deducted the treasure imported from China into India, the remainder will, roughly, represent the amount of China's debt to India, which England settles on behalf of

* Or the bills are sent to India, and against their proceeds bills are sold in China to remitters who have to pay China's debt to India; and the proceeds of the bills thus drawn in China are devoted to paying England's debt to China.

China through the Secretary of State's bills. This is shown in the following table:—

Annual average for undermentioned years.	Net exports of merchandise to			4	5	6	7	8	Percentage of 4 on 3.
	1	2	3						
	Foreign countries, except China and Eastern Settlements.	China and Eastern Settlements, less net imports of treasure.	Total.	Home bills on India.	Net imports of treasure from Foreign countries, except China and Eastern Settlements.	Total.	Rate of exchange on Secretary of State's bills, per rupee.	Price of standard silver in London, per oz.	
	£	£	£	£	£	£			
Years.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Pence.	Pence.	
1850-51 to 1854-55 5	1·196	5·162	6·358	3·371	2·025	5·396	$23\frac{3}{16}$	*A*60·4125	53·02
*B*1855-56 to 1857-58... ... 3	3·182	5·603	8·784	1·644	10·930	12·574	$24\frac{1}{4}$	61·4583	18·71
*B*1858-59 to 1861-62... ... 3	—1·381	6·850	5·469	·307	9·494	9·801	Nominal.	61·4687	5·61
1862-63 1	13·692	7·744	21·436	6·642	15·606	22·248	$23\frac{7}{8}$	61·4375	30 97
1863-64 to 1865-66 3	27·088	5·110	32·201	7·578	16·119	23 697	$23\frac{5}{6}$	61·2708	23·53
1866-67 1	2·364	1·773	4·137	5·068	2·120	7·188	23	*A*61·125	122·5
1867-68-69 2	3 917	5·859	9·776	3·921	5 638	9·559	$23\frac{1}{8}$	60·5325	4·1
1869-70-71 2	9·313	7·146	16·459	7·712	3·797	11·509	$22\frac{13}{16}$	60·5	46·85
1871-72 1	18·329	11·201	29·530	10·310	7·526	17·836	$23\frac{1}{8}$	60·5	34·91
1872-73-74 2	11·511	10·263	21·774	13·613	2·175	15·788	$22\frac{1}{2}$	59·7825	62·51

A.—In these years, large shipments of silver to China and India kept the price of silver and consequently the exchange high. The distrust of private bills, during the panic in 1866, also improved the rate of the Secretary of State's drafts.

B.—In 1857 and subsequent years there were large shipments of Government silver to India.

It appears from this table that when the Home Government's bills on India were not more than 35 per cent. of the amount of net exports for which England settles with India, the rate of exchange was high, that is, favorable to India. When the percentage exceeded 40, the rate of exchange was low, or unfavorable. In the two periods, 1854-55 and 1856-57, which seem to be exceptions to the rule, large exports of treasure from Europe to China, not shewn in the preceding table, kept the price of silver and consequently the rate for the Home Government's bills high. Indeed, the rates were exceptional, the Court of Directors having advisedly fixed rates discouraging to purchasers.

8. The next remark, suggested by the table in paragraph 7 and by table 6 attached to this Note, is that the price of standard silver in London remained above 61 pence an ounce, only while the shipments of gold and silver to the East ranged above (and greatly above) nine millions sterling a year. From 1833 to 1850, the price of standard silver was between 59 pence and 60 pence per ounce troy. In those 18 years, the price in one year was 60 pence, in two other years 60 $\frac{1}{16}$ pence, in a fourth year (1839) 60$\frac{3}{8}$ pence, and in the remaining fourteen years from 59 $\frac{3}{16}$ or $\frac{1}{4}$ to 59$\frac{3}{4}$ pence. In subsequent fourteen years, from 1853 to 1866, the heavy shipments of treasure to the East had run their course, and their effect in raising and keeping up the price of silver having then ceased, the price began to decline from 1867, and latterly the fall was accelerated by an increased importation of silver into Europe, and a less demand for it there and in the East:—till, now, the price (56 pence) is even lower than it was in 1834, *viz.*, 59$\frac{3}{16}$ pence per ounce. Opinions may differ, whether so low a price as 56 pence is not temporary, but there seems no room for hoping that a rate of 60 pence will be seen for the next thirty years: see Appendix C.

9. A further remark upon the table in paragraph 6 is necessary by way of caution. In a question of exchange, the remitting value of exports and imports has to be considered. Imports are valued at the Custom house at the wholesale cash price of the articles, at the place of landing, exclusive of duty; —that cash price, for the bulk of the imports, is the sterling* price converted into rupees at the exchange of the day. With exports the case is different. The value returned at the Custom house is the rupee value at the place of shipment:—the exchange, less than two shillings per rupee, at which bills are drawn against the shipment is not reckoned† in the Customs house valuation, and hence, when the rupee exports are turned into sterling in the Trade Returns at two shillings the rupee, they are stated at more‡ than their remitting value. Hence, if the rate of exchange does not respond to, or correspond with, the amount of net exports or the balance of trade, it is owing, partly, to the exaggeration of that balance in the Trade Returns.

10. In other words, the Indian Trade Returns show, in the exports from India, the amount in rupees which importers in England have to remit to India, and, in the imports into India, the amount which importers here have to remit to England. When,—with an exchange always less than two shillings per rupee,—these rupee amounts are turned into sterling at two shillings per rupee, the remitting importer in England is credited with the payment of a gain by exchange, and the remitting importer in India is debited with a loss by exchange. The credit for the payment of gain by exchange to the importer in England is illusory for the purposes of the Trade Returns, inasmuch as he really pays less (by the amount of that gain) than the Trade Returns credit him with paying for the exports from India. The importer in India pays about the sum shown against him, as explained in paragraph 9.

11. Another fact, in the table in paragraph 6, is the increase of the Secretary of State's drafts, from five millions in 1866-67, and nearly four mil-

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* In other words, with an exchange always below two shillings per rupee, the importer in India of goods from Europe pays more than Rupees 10 a pound for the home or sterling value of the imports, including freight; and these excess rupees which he pays are included in the Customs house valuation and are turned into sterling in the Indian Trade Returns at two shillings per rupee.

† If this were reckoned, it would form a deduction or abatement from the Customs house valuation: *per contra* however, freight is not reckoned, and that would add to the Customs house valuation, but not, it is believed, any such percentage as the difference in exchange which has to be abated.

‡ In other words, with an exchange always less than two shillings per rupee, the importer in the United Kingdom, or in Europe, of exports from India pays less than a pound for every Rupees 10 of the Rupees value of export from India, which is shewn in the Indian Customs house valuation, and which, in the Trade Returns in India, is converted into sterling at two shillings per rupee, or at 1£ per 10 rupees.

lions in 1867-68-69, to 13⅜ millions in 1872-73-74. The explanation is as follows :—

	Home Government's Bills on India.	Net payments into Home Treasury by Guaranteed Railways.	Amount borrowed in England.	Total.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.
1866-67 (11 months) ...	5·068	2·771	2·732	10·571
1867-68	4·137	4·991	1·224	10·352*a*
1868-69	3·706	4·251	1·534	9·491*b*
1869-70	6·980	2·096	4·039	13·115*c*
1870-71	8·444	2·354	2·424	13·222
1871-72	10·310	1·202	1·413	12·925
1872-73	13·939	—·659	...	13·280
1873-74	13·286	...	...	13·286

In 1867-68, the total of funds raised by the Home Treasury was 11·472 millions. In 1873-74, the amount of bills drawn was 13,286 millions, being an increase of 1·814 millions, chiefly caused by an increase of £1,200,000 in gross guaranteed interest, and £300,000 in interest of debt.

12. Excepting* about 1¼ or 1½ million sterling of government stores and Guaranteed Railways' materials, the bulk of the Home Government's drafts on India is (commercially regarded) a tribute from India to England;—that is to say, if, irrespectively of that tribute, the trade between India and foreign countries were equal,—the exports balancing the imports,—India would have to derange that balance, and to send additional exports equal to the amount of the tribute, or else to export a corresponding amount of bullion. It is shown in Appendix D that with silver demonetised outside Asia, the permanent and progressive fall in its price will be restrictive of the foreign trade of India, regarded as an interchange of consumable merchandise, except that silver will be imported as merchandise, because India, alone, in the East, will offer a fixed mint price for it, and merchandise will be exported in exchange for the silver; but this form of export will not assist the drawings by the Home Government on India.

13. The rate of exchange on the Home Government's drafts, the price of standard silver in London, and the intrinsic value of the rupee at that price, have been as follows :—

Year.	At price of Silver in London.			Home Government's drafts on India.			Percentage on column 3 of difference between columns 3 and 5.
	1	2	3	4	5	6	
	Price of standard silver per ounce.	Intrinsic value of Rupee at that price.	Rupees per £ at that price.	Rate per rupee.	Rupees per £.	Preceding rate adjusted to a fixed price of 61·5 pence per oz. of standard silver.	
	Pence.	Pence.	Rs.	Pence.	Rs.	Rs.	
1853-54	61⅛	22·8547	10·5011	24¼	9·897	9·897	5·75
1854-55	61⅛	22·8547	10·5011	23⅜	10·267	10·267	2·23
1856-57	61 1/16	22·7851	10·5332	24	10·	9·967	5·06
1862-63	61 7/16	22·8315	10·5118	23⅞	10·052	10·041	4·37
1863-64	61⅛	22·8083	10·5225	23⅞	10·052	10·032	4·47
1864-65	61⅛	22·8083	10·5225	23⅞	10·052	10·032	4·47
1865-66	61 7/16	22·6922	10·5763	23¼	10·105	10·033	4·45
1866-67	61⅛	22·7154	10·5655	23	10·435	10·371	1·23
1867-68	60 9/16	22·5064	10·6636	23⅛	10·378	10·22	2·68
1868-69	60⅛	22·4831	10·6747	23⅛	10·378	10·209	2·78
1869-70	60 7/16	22·4599	10·6858	23⅛	10·322	10·144	3·39
1870-71	60 9/16	22·5064	10·6636	22⅝	10·726	10·563	·59
1871-72	60⅛	22·4831	10·6747	23⅛	10·378	10·209	2·78
1872-73	60 5/16	22·4131	10·7123	22½	10·55	10·346	1·51
1873-74	59½	22·0186	10·8999	22½	10·786	10·392	1·03
1874-75	58 7/16	22·6702	11·0751	22½	10·786	10·228	2·6
December 1874 ...	57½	21·368	11·2317	...	...	...	...

The quotations of the price of silver are for the calendar year; those for the Home Government's bills are for the official year.

a.—Besides £1,000,000 repaid by British Government, on account of Abyssinian Expedition, and £119,750 for the China Expedition.

b.—Besides £5,113,580 of repayment as above.

c.— „ £1,400,867 of „ „

* In that case, there should be deducted from the net exports from India, which England settles for, the net exports to Persian Gulf, &c., which are settled for direct with India, independently of England;—paragraph 5 of this Note.

14. The rate of exchange is affected by—

1*st*.—The price of silver in London.

2*nd*.—The cost of its transmission to India.

3*rd*.—Seignorage on coining it in India.

4*th*.—The commercial demand for the Home Government's bills as a means of remittance to India.

To ascertain how far the rates have varied through the fourth cause, it is necessary to eliminate the effect of the other three causes, or rather of two of them; for the effect of the third is constant, seignorage not having varied during the period embraced in the table. The cost of transmission of silver to India has varied; but as the periods at which the cost was reduced are not exactly ascertainable here, the disturbing effect of that variation has not been eliminated; but the disturbing effect of the first cause, or the price of silver, is excluded from the rate in column 6 of the table, which has been obtained by adjusting the actual rate of exchange on the Secretary of State's bills, to a fixed price of 61·5 pence per ounce for standard silver. This has been done by multiplying the actual rate of exchange by the actual price of silver, and dividing by the fixed price of 61·5 pence. The quotient, in column 6, gives the rate of exchange as it would have been had the price of silver been 61·5* pence per ounce throughout the period embraced in the table.

15. From 1862-63 to 1865, a period of high exchange, the adjusted rate was uniform; in 1867-68 and 1868-69 the rate, still, was high, but it had declined below 1865-66; and it fluctuated in following years about the rate in 1867-68, but with a downward tendency. The adjusted rates in column 6 of the preceding table may be compared with the net exports and the amount of the Secretary of State's drafts as follows :—

	Adjusted rate of Rupees per £.	Net exports.	Home Government's bills on India.
		£	£
	Rs.	Millions.	Millions.
1862-63	10·041	25·228	6·642
1867-68	10 22	15·168	4·137
1868-69	10·209	17·072	3·706
1869-70	10·144	19·543	6·980
1870-71	10·563	21·918	8·444
1871-72	10 209	32·102	10·310
1872-73	10·345	23·967	13·939
1873-74	10·392	22·367	13·286
1874-75	10·228	20·350	11·812

The effect of fluctuating prices of silver having been thrown out, it is seen that when the Home Government's drafts were from one-third to one-fourth, or one-fifth, of the net exports, the rate of exchange was favorable, that is to say, fewer rupees per £ were paid in those years; but when the Home drafts amounted to more than half the net exports, the rates were unfavorable. 1874-75, however, was an exception to this rule, but, perhaps, only a seeming exception; for in that year the imports of cotton goods exceeded the imports of 1872-73 by above two millions, and if, as is probable, a large amount of the imports in 1874-75 was on credit, or consisted of speculative ventures, on their own account, by home firms like that of Messrs. Alexander Collie and Company, which lately failed for three millions sterling, and like other firms which have failed, such imports into India were made irrespectively of the exchange of the day, though they reduced the amount of net exports in 1874-75. On the whole, the tendency of the rate, as affected by the commercial demand, has been downward since 1869-70; and the decline which must be expected in the exports of raw cotton from India will accelerate the downward course.

16. But the decline in rate (apart from the decrease through the fall in the price of silver) is not wholly from slackness of commercial demand for the Home Government's bills or from increase of their supply. On comparing columns 3 and 5 of the table in paragraph 13, it will be seen that from 1862-63 to 1865-66 the rate of exchange on the Secretary of State's bills was better than the

* In 1862-63 the price of standard silver in London, according to the latest statement of it in the *Economist*, was $1\frac{7}{16}$, or $\frac{1}{4}$ less than 61·5; but according to a statement in last year's *Economist* it was exactly 61·5 pence per ounce.

intrinsic par of the rupee, as measured by the price of silver in London, by decimal 46 to 47 of a rupee per £, but, in later years, the betterness or advantage ranged generally between ·286 and ·296 of a rupee per £. The difference of ·174 of a rupee per £ upon Rs. 10·05, or the rate of exchange per £ in 1862-63 to 1864-65, is nearly 1¾ (1·73) per cent. in favor of home remitters, and against the Secretary of State. This is owing to the reduction, since the earlier period, of the cost of sending bullion to India.

17. In a paper of 6th March 1864, appended to Sir C. Trevelyan's Minute on a gold currency for India, Mr. H. G. Dunlop, Manager of the Agra Bank, computed the charges of that day for sending bar silver from London to India at 3¼ per cent. on account of freight, insurance, brokerage, &c., exclusive of seignorage. Four and a half years later, or on 10th September 1868, Mr. Morris, Agent of the Agra Bank, Bombay, and Secretary of the Bombay Chamber of Commerce, stated the average charges of laying down a rupee at 1⅝ per cent. on the price of silver. Colonel Carpendale, Mint Master, Madras, writing on 16th September 1868, stated that the charge for silver, from London to India, "would only be a trifle more than 1½ per cent." Mr. G. Dickson, in a memorandum dated 7th February 1872, observed: "Former estimates give the charge of laying down silver in India at 3¼ per cent., but, as more active competition, and the opening of the Suez Canal, have caused considerable reductions in both freight and insurance, the present rate may safely be taken at 1¼ per cent. only" for silver; and this 1¼ per cent. is held to be the rate in 1875. Thus, there has been a decrease from 3¼ per cent. to 1¼ per cent., or of 2 per cent., since 1862, 1863, and 1864, in the cost of transmission of silver to India; and the remitters to India have appropriated nearly all this reduction in their purchases of the Secretary of State's bills.

18. The price, however, of the Secretary of State's bills is raised to the buyers thereof (that is, to the home remitters to India), not alone by the cost of sending silver, but also by the seignorage on the coining of it in India. If, therefore, seignorage on silver had been raised by the amount of decrease in cost of its transit to India, the advantage which the buyers of the Secretary of State's bills have appropriated would have remained with him.

19. Again, as between the Secretary of State and the buyers of his bills, the argument that the cost of a remittance between England and India should about equal the cost of sending silver from either country to the other, is one that should cut both ways. If, after the cost of transit has been reduced by 2 per cent., buyers of the Home drafts claim that reduction, on the plea that, if not allowed it, they will send silver to India in preference, it should, apparently, be in the power of the India Office to reply that, rather than abate the former rate, while, (for the present argument) there has been no other change in the price of silver, or in the commercial demand, the Government will bring bullion from India in preference. But the silver currency of India gives the home remitters an advantage, and places the Secretary of State at a disadvantage in this respect.

20. In other words, if the Government of India had gone its own way, and merchants had kept to their separate way, the former would have exported 13 millions sterling of bullion for home disbursements, and the latter would have imported a corresponding amount of bullion to pay for that much of the excess of exports from India over her imports. Supposing this practice to have existed from 1862-63, the Government of India would, in the present day, have saved 2 per cent. in the cost of transit, and the trade would have done the same. But the two united their ways, in order to avoid the sending of silver to India only to bring it back again to London, and then it came about that the saving in the cost of transmission accrued almost wholly to commerce*, and the Indian Government got but little of it. With a gold currency of legal tender in India, this would not have been the case.

21. It has been seen (paragraph 15) that a few millions sterling more or less in the amount of the Secretary of State's bills on India lowers or raises

* Or rather to only one-half of the commerce, *viz.*, to exporters from India, and importers into the United Kingdom. Exporters from the United Kingdom and importers into India have suffered the same disadvantage as the Indian Government.

the price of the bills. Hence measures for reducing the amount of the drafts seem desirable, *viz.*:—

1*st.*—The invested reserve of the Government paper currency is held in rupee stock in India to the amount of £5,693,593. The sale of this large amount of stock, or of any considerable part of it, in Calcutta and Bombay, would seriously depress the market so as to injure other holders of stock, unless the sale were spread over several months. So far as any such consideration might restrain a free sale of the securities, it must impair the efficiency of this invested reserve in maintaining the convertibility of the currency notes. Accordingly, the reserve might be advantageously held in London by the Secretary of State in one of the India sterling loans. Thereby sales could be effected at any time, and to any amount;—and the proceeds could be remitted to India by stoppage of the Secretary of State's bills on India: more than three millions sterling could be remitted to India in this way in three months, while the sale of that amount of stock in India would have to be spread over a longer time. The interest on the stock would be adjusted by a transfer entry in the accounts, and the home drafts would be reduced by the amount of that interest. The loss by exchange that would be avoided might amount now to £18,000 a year;—this would be as a mere drop in the ocean;—but in course of time it might grow to a considerable amount. If it be objected that 5½ millions of rupee stock cannot be readily sold, then so much the worse for its suitableness as currency reserve.

2*nd.*—It appears from Appendix C, paragraph 40, that the yearly accumulations of capital in Australia are vast and the rate of interest low. A great deal of this capital might be attracted by the India sterling loans, were arrangements made to pay the interest of that stock in Australia (Appendix B, paragraph 5, page 31). If in course of time, ten out of forty millions of India stock were to be transferred from London to Australia, the Secretary of State's bills on India would be reduced by some 4 or 500,000*l*, or by a proportionately larger amount for a larger transfer. The Government could, also, in this way, feel the pulse of the Australian money market; for, the price there of Indian stock would show whether some of the future loans of the Government of India might not be raised in Australia to tap the vast annual accumulations of wealth.

3*rd.*—Funds for paying interest in Australia could be easily provided by the Government's agent there, drawing upon India. Furthermore, it is shewn in Appendix C, paragraph 39, that Australia settles through England an annual debt to China and India of 4 millions sterling. As a larger amount is due by China to India, it would be possible, on the introduction of a gold currency in India, for the Government of India to sell bills in Australia on an agent in China, who would keep himself in funds by selling bills on India. The sales in both places would be effected at a premium. As only 4 or 500,000*l*. of interest might be payable in Australia, the balance could be remitted thence to London, sometimes at premium or at par,—at other times at a discount of ½ per cent., which discount would be more than covered by the premium on bills on China, and on bills drawn there on India. On the whole operation there would be a gain. France in paying the war indemnity, and Germany in laying in gold for the new German coinage, resorted largely to bill operations, and the Secretary of State annually sells bills to the amount of 13 to 15 millions sterling. As the transaction would differ in no respect from this last, and as, in the form of diminished loss by exchange, it would give to India relief from old, or an escape from new, taxes to the amount possibly of £250,000 a year, besides improving the price of the reduced amount of Home bills on

India, the magnitude of the transaction, its legitimate character, and the great public benefit involved, may prevent its being regarded as of the nature of private banking, and as an interference with private banks. The present loss by exchange of about one and a half million a year, gives a profit, it is true, to private banks,—but the banks cannot, in reason, expect that if a way is open for averting that loss, the Indian Government should not avail themselves of it.

22. It was stated in paragraph 18, that when, through the opening of the Suez Canal, the cost of sending bullion to India was reduced by about 2 per cent., the Government could have appropriated the reduction by a corresponding increase of seignorage. A banker in London, buying the Secretary of State's bills, would in 1862 give a rate of exchange, determined by the demands of the day, but not, generally, a higher rate than the price of silver in London, *plus* a charge of 3¼ per cent. for freight and insurance, and 2 per cent. for seignorage. The 5¼ per cent. formed his margin. If seignorage had been increased one per cent., his margin would have become 6¼ per cent.; conversely, when freight and insurance were reduced to 1¼ per cent., his margin, adding the Indian seignorage of 2 per cent. became 3¼ per cent., in other words, the exchange fell. But if the Government of India had increased the seignorage to 4 per cent., this rate, *plus* 1¼ per cent. of reduced freight and insurance, would still have kept the margin up to 5¼ per cent., as though none of the conditions of the exchange in 1862 had altered.

23. The effect upon the exchange of the depreciation of silver can be counteracted in the same way, namely, by an increase of seignorage. If silver has depreciated 8 per cent., a corresponding increase of seignorage would neutralise the effect of that fall upon the rupee exchange with sterling; but as this subject has a special importance for India, it may be discussed, in detail under the heads of—1*st*, its efficaciousness; 2*nd*, its expediency; 3*rd*, any limit to the increase of seignorage.

24. On the first head the proof in paragraph 22, and the fact that Indian seignorage is invariably reckoned in estimating the outturn of a remittance of silver bullion, say from London to India, seem conclusive;—the reason being that the bullion would be inoperative in India for settling any account, or for buying goods for shipment, until turned into coin, or until exchanged at the Paper Currency Office (*minus* seignorage) for currency notes which are convertible into coin. Millions of silver might be sent to India, but unless the silver was put into circulation as coin, it would have no effect on prices. The vast quantities of gold which have been imported into India have had no such effect, except through having passed into circulation as coin in Native States.

25. Thus Mr. J. S. Mill observed: "It is habitually assumed that "whenever there is a greater amount of money in the country, or in existence, "a rise of prices must necessarily follow. But this is by no means an in- "evitable consequence. In no commodity is it the quantity in existence, "but the quantity offered for sale that determines the value. Whatever may "be the quantity of money in the country, only that part of it will affect prices "which goes into the market of commodities, and is there actually exchanged "against goods. Whatever increases the amount of this portion of the money "in the country, tends to raise prices. But *money hoarded* does not act on "prices. Money *kept in reserve* by individuals to meet contingencies which "do not occur, does not act on prices. The money *in the coffers of the Bank*, "or retained as a *reserve* by private bankers, does not act on prices until "drawn out, nor even then unless drawn out to be expended in commodities." The passages in italics describe the position which silver bullion, that has not paid seignorage, would occupy, though it might be imported to the amount of 50 millions sterling. Professor Jevons, in a passage which cannot be immediately traced, stated as an accepted fact, that (as, indeed, is self evident) bullion which is not represented by an equal amount of paper currency, does not act upon prices; in other words, it is not effective as money. If Government raised the seignorage to 10 per cent., and an importer of silver endeavoured to avoid the extra payment by selling the bullion in the market, no

one would give for it more rupees than he would get by sending it to the mint for coinage. In other words, whatever may be the price of silver abroad, in India its price would be that foreign price less Indian seignorage; that is to say, with a seignorage in India of 10 per cent., the importer of silver into India, who may have bought it in London at 55 pence an ounce, would have to thrown in an extra one-tenth ounce for seignorage (exclusive of transit charges), before a buyer in India would look at it at that price. In effect the cost to the importer would be 60½ pence an ounce, exclusive of transit charges,—the same as if he had bought and sold it in London at that price.

26. On the second head in paragraph 23, or the expediency of increasing the seignorage on silver, but little need be said. It is shown in Appendix D that the flooding of India with depreciated silver will disorganise the finances, paralyse the import trade, and give an unhealthy stimulus to the export trade. The latter trade is the most profitable when it exchanges for imports of merchandise, which, by displacing dearer articles of local production, reduce local prices; and it is the least profitable when it exchanges for millions of depreciated silver that cause a disastrous rise in local prices, to which gold prices abroad will not respond, except by a fall on account of the increased exports sent to the foreign market. As a sufficient increase of the seignorage on silver would prevent these calamitous results, the expediency of the increase is perhaps manifest.

27. Such an increase of the seignorage would not increase the mint income, its object being to avert the calamitous results of an excessive import of silver which has depreciated abroad. The seignorage could be pitched high enough to save India from a flood of silver as merchandise, and yet not too high to prevent its passing into the Indian currency after paying such a mint duty as would raise its depreciated value abroad to the level of its, till lately, ordinary conventional value, in the Indian currency, in relation to all other articles.

28. When the price of silver in London was 60½ pence per ounce, the condition of the exchange was favorable to India, and a rate of seignorage which might restore the existing price of, say, 56 pence an ounce in London, to 60½ pence in India, exclusive of freight and insurance, might be suitable. The import trade would be immensely relieved thereby, while the export trade would, by the late repeal of the 3 per cent. export duty, and by the decrease of 2 per cent. in cost of sending silver to India, be better off than when the exchange ruled on the basis of a price of 60½ pence per ounce of standard silver. The present seignorage is 2 per cent., and an addition of 8 per cent., making the total seignorage 10 per cent., would restore the former state of things. Manchester, with which the interests of India are largely identified, would gain 8 per cent., that is, would benefit far more than by the repeal of the 5 per cent. import duty on cotton goods, which duty, and the import trade in those goods, might, on the other hand, cease in time, from a further fall in the price of silver, if seignorage be not raised in the manner suggested.

29. Among the extracts in Appendix F is one from Mr. J. S. Mill, deprecatory of a high seignorage, because it will tempt coiners to coin good money for a profit equal to the seignorage;—but 10 per cent. will be much below that dangerous point. Mr. McCulloch observed: "When the market price of "silver is 5 shillings per ounce, the seignorage is equivalent to precisely 10 "per cent. (the cost of coinage being about 2 per cent.), and hence there is a "very large apparent profit to the Crown;—but as the Government is subject "to the renewal of the silver currency, and to the great loss accruing from the "issue of the coin, and consequent diminution of the weight, the gain from "this source, eventually, cannot be considerable." Again, in the new German coinage, silver is overvalued, as a token coinage, to an extent which gives a seignorage of 10 per cent.;—so that, even in Europe, where there are great facilities for coining in a style equal to that of the mints, no danger is apprehended, or has been experienced from a seignorage of 10 per cent. Indeed, a scarcity of silver coin in England has been felt for some years; whereas had private coining prevailed, there would have been an excess.

30. At the existing price of 56 pence an ounce, the seignorage on the shilling is 17·87 per cent. (Appendix A, paragraph 6). This rate, or rather, the scarcity of shillings, of late years, appears to have tempted coiners,—there having been recent mention in the *Pall Mall Budget* of a collusion between certain railway ticket issuers and coiners to pass off spurious shillings. But the discovery of the attempt shows the difficulty of passing spurious coin into circulation, on such a large scale as to compensate the risk and trouble; and considering the respectability of the importers of silver into India, the difficulty of coining in a style equal to that of the mints, and on a large scale, without being observed, or of issuing spurious silver coin on a large scale, and the suspicion and vigilance which would be aroused if large quantities of silver were imported into India without passing into the mints of the Government or of Native States,—the risk, in India, from spurious coining, especially with a seignorage of 10 per cent., which does not tempt forgers in Europe, would be infinitesimal, or would certainly be less than that from the forgery of stamps or of currency notes, while the benefits from an increase of seignorage in putting an end to the depreciation of the silver currency would transcend the advantages derived from a paper currency and from the stamp revenue.

31. When silver is at 56 pence an ounce, the seignorage on it, in the English shilling, is 17·87 per cent.; yet the *Economist*, writing on 26th June 1875, when about this price obtained, did not think that the temptation to forgers was then sufficient (Appendix B, paragraph 59). It is, indeed, probable that the price of silver will fall still further, and that when a much greater fall than 10 per cent. is reached in India, the seignorage must be raised still higher, in which case risk may be incurred of tempting spurious coinage by the large profit which the enhanced seignorage would afford. To avert this risk, and to enable the Government to keep the seignorage within safe limits, it would be necessary to adopt, temporarily, a double valuation, by declaring gold to be legal tender concurrently with the rupee, and fixing a relative value between the two. This would be a temporary measure, and one preliminary to the adoption of a single standard in gold.

32. With standard silver at 60½ pence and at 56 pence an ounce respectively (Appendix A, paragraph 6), the intrinsic par between the rupee and the sterling, and the relative value of gold to silver, are—

Per ounce.		Intrinsic par.	Gold to silver as
Pence.	Rs	Pence.	
60½	1 =	20·4831	1 to 15·5867
56	1 =	20·812	1 to 16·8392
		1·6711	1·2525
Per cent.		8 p. c. on 20·812	8 p. c. on 15·5867

If eventually a single gold standard, with meanwhile a temporary double standard of gold and silver, be adopted, a relative value must be fixed between the new gold coin of legal tender and the existing rupee. In fixing this relative value it would be necessary to keep in view certain conceivable contingencies:

1*st.*—Gold may not be attracted, at all, at the valuation which may be fixed;

2*nd.*—Or, at that valuation, silver may be exported in exchange for gold from abroad;

3*rd.*—Or silver may be imported for purchasing and exporting the gold of legal tender which may have been brought into the country;

4*th.*—Whether, on cessation of the double standard, the withdrawal of the existing coinage of rupees which may then be in circulation, and its replacement by a silver token coinage, will be practicable without enormous expense, within reasonable time, and by what measures?

33. When the relative value of gold to silver was 1 to 15½ within the French currency, while, at the London market-price, gold was to silver as 1 to nearly 15⅓, or 15⅜ or 15¼, that small difference in price (out of which minting and transit charges were met) sufficed for the introduction into the French

currency of 150 to 200 millions sterling of gold, and for the withdrawal from it of a corresponding amount of silver. What India, however, needs for the present is, not the withdrawal of silver from the Indian currency as a bullion operation, but the replacement of silver by gold in future importations of bullion for settling any balance of trade. Accordingly, the question is not what relative value between gold and silver will suffice to expel silver, but rather what relative value will make the future importation of gold into India, for coinage, more profitable than the importation of silver.

34. In the extracts about seignorage, in Appendix F, there are arguments to which Mr. Jevons and Mr. Lowe, when Chancellor of the Exchequer, inclined in favor of levying seignorage on the coining of gold. For India the arguments have additional force from the consideration that the rate for the Secretary of State's bills on India is always improved to the extent of the seignorage levied in India, because the purchasers of his bills reckon seignorage among the expenses of an alternative remittance of bullion, when they elect to buy the bills in preference. But a successful transition from a silver to a gold standard in India will be very much helped, if, at least during the period of transition, gold be coined by the Indian mints free of charge to the importer (except for assay and refining) whilst the seignorage on silver is increased in the manner explained in paragraph 28. On this assumption, a relative value between the new gold coin and the rupee, of 1 to 15·5867 would suffice to attract gold to the Indian mints.

35. As stated in paragraph 32, a relative value between gold and silver of 1 to 15·5867 represents a price of 60½ pence per ounce of standard silver in London. With silver at 56 pence an ounce in London, the price in India with 10 per cent. added for seignorage (paragraph 28) would be 61·6 pence. With silver at 55 pence an ounce, the 10 per cent. addition for seignorage would make the price in India 60½ pence; and as the transit expense of sending silver to India is 1¼ or $\frac{10}{8}$ per cent., while the similar expense of sending gold to India was stated by Mr. Dickson, in February 1872, to be ⅞ per cent., the choice, even with silver at 55 pence an ounce, in London, would incline in favor of gold. Furthermore, there is nothing to hinder the adoption by the Government of India of the wise arrangement by which the Government of Holland ("proverbial for its caution," in the words of Mr. Wilson) has stopped the unrestricted importation of silver into its mint (Appendix A, paragraphs 31 and 32); the more so, as the countries of the Latin Mint Convention have done nearly the same thing, by permitting an unrestricted coinage of gold, but restricting the coinage of the silver 5-franc pieces to certain amounts that are fixed annually, with the view, not of attracting silver from abroad, but of re-coining worn out silver coins in the country, which have accumulated in the Government treasuries.

36. But although a fixed relative value between gold and silver of 1 to 15·5867 represents a price of silver in London of 60½ pence an ounce; and though, secondly, a price of 55 pence an ounce with 10 per cent. additional for seignorage would also amount to 60½ pence, yet it would not follow that the abovementioned relative value would be endangered by a further fall to, say, 54½ pence, because silver bought in London for this price could not enter the Indian currency without paying 1¼ per cent. for freight and insurance, additional to 10 per cent. as seignorage, and without the gold which is carried away paying another ⅞ per cent.

37. Should the price of silver fall below 53 pence after the adoption by Government of a relative value between gold and silver of 1 to 15·5867, and before completion of the change to a single gold standard, the courses open to the Government would be—

1.—To stop the receipt of silver in the mint, as in Holland, or to restrict the coining of silver coins of legal tender within a fixed amount, as in the countries of the Latin Mint Convention. This would be without prejudice to the continuance as legal tender of the rupees now in circulation; it would simply bring about a result, that future additions to the metal of legal tender would be in gold.

2.—To increase the seignorage on silver beyond 10 per cent. This would be a milder measure than the preceding, or than the absolute demonetisation of silver.

3.—To alter the relative value between silver and gold from 1 to 15·5867 to 1 to 16 or any other suitable rate. There would be nothing unsound in this alteration of the fixed valuation, but it would be necessary to arrange for a change and to give timely notice of it.

38. Hence it would appear that by waiving seignorage on the coining of gold, levying a seignorage of 10 per cent. on the coinage of silver, and fixing the relative value between gold and silver in a proportion of 15·5867 of silver to one of gold, the latter metal would be attracted to India, in preference to silver, in settlement of any annual balance of trade, particularly if the further advantage, stated in paragraph 54, be allowed to remitters of gold.

39. The second contingency stated in paragraph 32 is that at the relative value between silver and gold, which may be fixed, the silver rupees would be exported. At 55½ pence an ounce the relative value of silver to gold is 16·9909 to 1:—at the valuation above suggested, *viz.*, 15·5867 to 1, the rupees now in circulation would have a higher value within the currency than outside, to the extent not merely of the above difference, but of 2⅛ per cent. additional for importing gold from abroad, and for carrying away the silver. Accordingly, with a relative value fixed as above suggested, the rupees now circulating in the country could not possibly leave it, except at a loss to the exporter, unless they were sent to a silver coin country in exchange for merchandise. Hence, there would be leisure for spreading the transition from a silver to a single gold standard over a convenient term of years, during which gold coin would be accumulated in the country,—(in Government treasuries) without any stress to trade or to the mints.

40. But this leads to the third point stated in paragraph 32, *viz.*, that possibly as fast as the new gold coin is issued from the mints, it may be purchased with cheap silver from abroad and exported. This difficulty is met by the remarks in paragraphs 36 to 38: under the conditions which, as stated in those paragraphs, can be secured, a bullion operation for importing cheap silver, and withdrawing gold,—at a charge, both ways, of 2⅛ per cent. for freight and insurance,—would be impossible, provided the Government will begin the change soon, and complete it with moderate despatch.

41. Thus we arrive at the fourth question in paragraph 32, *viz.*, whether, on cessation of the double standard, the withdrawal of the existing silver coinage, and its replacement by a silver token coinage, will be practicable without enormous expense, within reasonable time, and by what measures? This depends on the amount of the silver coin in circulation; the portion thereof to be replaced by gold; the profit from replacing the remainder of the silver currency by a token coinage; and the extent to which that profit will cover the expense of the token coinage, and the loss from sale of the silver which will have been replaced by the gold coinage.

42. The present silver coinage in India was introduced in 1835, and the previous coinage may be considered to have been entirely withdrawn. The gross or outside amount of silver currency in India is represented, accordingly, by the total silver coinage from 1835 to 1874. This has been as follows:—

	Rupees.	Half, quarter and one-eighth Rupees.	TOTAL.
	£	£	£
	Millions.	Millions.	Millions.
1835-36 to 1872-73...	194·657	8·737	203·394
1873-74 ...	.....	.....	2·370
1874-75 ...	.. ...	.....	4·897
			210·661

A great part of this was recoinage of the old sicca rupees, and of rupees of the former native rule, which were withdrawn from circulation on the annexation of the Punjab, Oudh, Nagpore, and British Burmah.

43. From the gross amount certain abatements have to be made as follows:—

1*st.*—The period from 1835-36 to 1872-73 included that of the first and second Afghan wars, from 1838 to 1842. During this latter period the debt of India increased by about six millions sterling, mostly for those wars; and the bulk of the war expenditure was incurred in Afghanistan in rupees. Again, rupees were spent abroad in the expedition to Persia, and above one million sterling of rupees plundered from the treasuries during the mutiny, may have been melted.

2*nd.*—Expeditions to China occurred at various periods between 1839 and 1860; and though the expenses of the earlier expeditions were borne entirely by the British Government, yet the fitting out of the expeditions from India, and the payment of troops and transports in China from India, necessitated large exports of rupees. This, however, may perhaps merge in the next item, though not entirely, for the trade returns of exports of Government treasure were possibly incomplete.

3*rd.*—The silver exported from India from 1835-36 to 1874-75 amounted to 39·975, or say 40 millions sterling. It is more advantageous to export coin than bullion, because the value of the coin, even as bullion, is ascertainable without fresh assay, by taking the total weight of the coin, and multiplying by the decimal fraction which represents the fineness; and it is a fair presumption that the best part of the export of silver was in coin.

4*th.*—The pilgrims to Mecca, in the period of forty years, from 1835 to 1874, must have melted rupees into bullion, and thus carried abroad large sums aggregating, for the forty years, a considerable amount, to which a material addition might be made for the rupees, intact or melted, which emigrant coolies carry with them. The remittances of these coolies from the colonies, if reaching India as silver, will have passed back into the currency as a fresh coinage of rupees, which is already included in the gross total in paragraph 42; or, if the remittances were by bills, they will not have added to the amount of silver currency in India.

5*th.*—The rupees of the British Government are at a discount in Native States; and though those who buy the rupees at a discount may find it profitable to re-export them to British territory, yet much of the British-Indian coin, thus obtained, is doubtless melted and recoined in the Native mints.

6*th.*—On the north-west frontier of the Punjab, the imports of merchandise from abroad exceed the exports by £100,000 to £200,000 a year or more; and if, before the annexation of the Punjab, the imports thence exceeded the exports thereto from British territory, that circumstance must have caused a further export of rupees.

7*th.*—It has always been understood that rupees are largely melted down for hoarding, or for conversion into ornaments, and this practice has been in force for the whole forty years.

8*th.*—The gross total coinage of 211 millions from 1835-36 to 1874-75 includes—

	Amount coined. £ Millions.	Age of coins in 1874. Years.
1835-36 to 1844-45 ...	35·967	40 to 31 years.
1845-46 to 1854-55 ...	32·544	30 to 21 years.

The rate of wear and tear of silver is greater than that of gold, and a material portion of the coinage from 1836 to 1845, must, through being worn out beyond the limits of weight, have ceased to be legal tender.

44. Combining the abatements under these several heads, and considering that those under the fourth, fifth and seventh heads have been in operation for 40 years, whilst that under the sixth head has also been in operation for the same time, but in different degrees for the periods before and since the annexation of the Punjab, it may not be unreasonable to assume that the silver currency of India, now existing in a state fit for legal tender, does not exceed 130 millions, and that an estimate of this amount is excessive.

45. The 130 millions sterling of silver coin circulation may be assumed to include 5 millions out of $8\frac{3}{4}$ millions of small silver coins which were struck from 1835 to 1872, and which would be replaced by a silver token coinage. Of the remaining 125 millions, 60 millions may be assumed as the outside requirement of gold for the new coinage, and the remaining 65 millions as the amount of full weight silver coin which, on completion of the change to a single gold standard, would be replaced by a new silver token coinage. These 65 millions, *plus* the 5 millions of small silver coin, would give a total of 70 millions to be replaced by silver tokens.

46. Thus the objects to be attained would be—

1*st*.—The coinage of 60 millions sterling of gold (an excessive estimate), and the withdrawal of that amount of the old silver coinage, on the introduction of a gold currency.

2*nd*.—The replacement of other 70 millions of silver coins of full value by an equal amount of silver tokens before, or concurrently with the issue of the gold coins.

3*rd*.—A further issue of 30 millions sterling of tokens.

The last-mentioned extra issue of 30 millions sterling of tokens would be expedient. Of late, through the depreciation of silver, prices have been inflated, and when, with the levy of a 10 per cent. seignorage on silver, and the introduction of a gold currency, that inflation shall cease, the sudden collapse, if aggravated, by a further fall in prices from a starved metallic circulation, might injure production and trade. The extra issue of a silver token coinage would break the fall in prices, and also, partly, would supply a permanent want. For the 60 millions of gold coin would withdraw from circulation about 600 million pieces of silver coin; and this gap must be filled up. The most convenient way of filling it up might be by issuing a silver token coinage of greater nominal value than the present rupee. In France, the largest silver coin is the 5-franc piece; and the following question might be remitted to the Mint Masters for consideration, *viz*., how should the new silver token coins be regulated in weight and fineness, so as to retain among them one coin of the weight of a tolah, and to admit of a seignorage of 10 per cent. on a basis of 55 pence per ounce of standard silver, and of a rating of gold with silver of 1 to 15·5867; and so as to admit of the introduction, as a token, of a coin which shall exceed the present rupee in nominal value to as great an extent as may preserve the coin from being tampered with for the silver in it, or from other forms of depreciation or fraud.

47. Before stating the measures necessary for the objects above set forth, a risk incidental to the adoption of a double standard, which is not mentioned in paragraph 32, nor discussed in subsequent paragraphs, may be considered, *viz*., that if the new gold coins be allowed to circulate concurrently with the present silver rupees, and to be exchangeable with the latter at the relative value of 1 to 15·5867, then the present rupees, which are not suitable for export, owing to the depreciation of silver abroad, would, as legal tender for any amount, be used for buying up the new gold coins, which would be exported as fast as they might be issued from the mint. To avoid this, the gold coins would have to be retained by Government, until they amount to the 60 millions sterling required for the introduction of a gold currency; in other words, the double standard would be operative so far only, that, by the declaration of gold as legal tender, and of its exchange with the silver currency at a fixed value, gold would be

attracted to the mint from abroad, or from hoards in the country;—but those who carry it to the mint or to the Paper Currency Department would be paid in silver, at the exchange fixed for the double standard—while the Government would retain the gold.

48. But by paying out silver in exchange for the gold, and locking up the gold, the cash balances would be reduced by the amount of the payments, and the consequent deficiency in the treasuries would have to be met by borrowing an amount equal to the purchases of gold. The borrowing would be inevitable; but the loan would be paid off on completion of the change to a single gold standard, and meanwhile the interest on the loan would be covered by savings from the entire operation.

49. The borrowing most conducive to the rapid introduction of a gold currency would be for the Secretary of State to cease drawing upon India, and to raise the full amount of his requirements, *viz.*, 15 millions sterling and 5 millions more per annum, by borrowing in London. On the total cessation of his drafts, treasure to the amount of 20 millions sterling a year would be imported into India, and that treasure would be principally gold (paragraphs 34 and 35). By the cessation of 15 millions of home drafts, that amount of silver would be set free in India for the purchase of 15 out of the 20 millions of gold. The remaining 5 millions of (possibly) gold could also be paid for from the cash balances in India, which would be replenished by the Secretary of State sending out in silver tokens of the new coinage the odd 5 millions sterling which he would borrow in excess of his own requirement of 15 millions. The fineness and weight of these tokens, and their ultimate rating in the new gold currency, might be adjusted so as to yield a seignorage of 10 per cent. with silver at 55 pence an ounce,—that rate of seignorage being the one adopted by Germany, and the rate which prevailed for the English shilling, when the price of silver was 60 pence an ounce. In issuing the tokens, at once, they may be declared temporarily as legal tender for all sums concurrently with the existing rupee, and their exchange with the latter might be fixed at nominal par, *plus* a premium not exceeding 10 per cent. in favor of the existing rupee, which contains 10 per cent. more of silver than the token rupee would contain.

50. In this way, there would be put in circulation 5 millions a year of silver tokens, or 20 millions in four years; and at least 60 millions of gold will have accumulated in the four years in the hands of Government;—total 80 millions. The remaining 50 millions of silver tokens, for making up a total of 70 millions worth of those tokens, could be coined in the four years in the two Indian mints, the stated powers of which are equal to this amount of coinage ($12\frac{1}{2}$ millions sterling a year) without extraordinary efforts; but, if need were, the strength of officers and establishments might be doubled or trebled for working the mints day and night, without cessation, except for two or three days in each month for cleaning and repairing the machinery.

51. The silver tokens struck in the mints would be issued immediately as they are coined. The Government treasuries at the Presidency could feed the mints with the old or existing rupees for recoinage into tokens, and, on introducing the new token coinage, a proclamation might be issued that the old rupees will after four years cease to be legal tender, or to be exchangeable with the new silver token at a premium of 10 per cent., and will be withdrawn from circulation, the Government buying them (according to weight) with gold rupees at a price of 55 pence an ounce of standard silver, or at the market price of the day; but that the new silver token coinage will remain in circulation as legal tender up to 50 rupees. The old rupees, as containing 10 per cent. more silver than the tokens, would, in effect, be bought for the intrinsic value of the tokens, *plus* a premium of 10 per cent.

52. Thus far the result would be that, at the end of four years, the Government would have—

1*st.*—accumulated 60 millions sterling in gold, with the help of borrowed money;

2*nd*.—issued 20 millions sterling of silver tokens, also with the help of borrowed money, but with a gross profit, on the issue, of 10 per cent. seignorage;

3*rd*.—issued other 50 millions sterling of silver tokens, with a profit of 10 per cent. seignorage, less the expense of recoining an equal amount of existing rupees.

It would then remain for the Government to issue the 60 millions sterling of gold coins, and to dispose of the silver which may be withdrawn by such issue. But before entering upon this subject, we may consider whether the whole of this gold would have to be obtained from Europe, and whether it would be necessary to lock up for four years, in India, an annual accumulation of 15 millions sterling of gold.

53. China already sends gold to India;—and, on the declaration of gold as legal tender, China would yield up to India much of the gold which that Empire has absorbed from Europe and Australia in the past twenty years. The produce of the gold mines which are known to exist in China might also be attracted to India. Some part of the many millions sterling of gold which have been absorbed in India might also be called forth by the declaration of gold as legal tender. If, from these two sources, 5 millions a year were to be obtained in four years, only 40 millions would be required from Europe; but we may assume that the whole 60 millions must be got from Europe.

54. With regard to the gold to be drawn from Europe, the seignorage of 10 per cent., that is, of an extra 8 per cent., on the importation of silver into India, will be tantamount to raising its price (and, conversely, of reducing the price of gold) in India and for Indian exchanges, from 56 pence to 61½ pence an ounce, or to a relative value between gold and silver of 1 to 15·3342. For convenience of exposition, it was stated in paragraph 48 that the Secretary of State might suspend his drafts on India for his own requirements,—thus throwing on commerce the necessity of sending 15 millions sterling in gold to India, where it could be exchanged for silver rupees at the relative value of 1 to 15·5867. Instead of this, the Secretary of State, while still borrowing 15 millions a year for his own requirements, might, as a coinage operation, issue bills on India for gold to be deposited with him in England; —the issue to be at an exchange between gold and silver of 1 to 15·5867. Those who, but for this arrangement, would send 15 millions sterling of gold to India at a cost of about $\frac{7}{8}$ per cent. for freight and insurance, would be saved this transit charge by accepting the Secretary of State's bills, and thus the 15 millions per annum would accumulate in gold in England.

55. But in England gold represents money which yields interest; and, furthermore, in England, or rather, in Europe, the Banks of England, France, and Prussia, and Messrs. Rothschild and other wealthy firms, can with every safety be entrusted with a contract or with separate contracts, under which the 60 millions sterling to be deposited with them in annual instalments, would be forthcoming at the end of four years in the form of new Indian gold coin, or in that of new sovereigns. For the use of the money, meanwhile, they would allow some interest to the Secretary of State, which would reduce the gross interest charge on his borrowing of 60 millions, by 1½ or 2 per cent., while the Secretary of State, on his part, would reimburse the Banks, or the firms, the expense of coinage.

56. By this arrangement, the net interest charge on the borrowings by the Secretary of State would be reduced as above stated, and the further advantage would be secured that gold would not be withdrawn from Europe for India until, possibly, 1880, by which time the wants of the countries which, in that interval will alter to a gold standard, or will resume specie payments, will have been fully supplied, while France, Austria, and the United States may liberate large amounts of gold coin, exceeding the Indian demand, and absorb silver by enlarging the legal tender limits of their subsidiary silver coins, as explained in Appendix C, paragraphs 144 to 151.

57. On the introduction of a gold currency, the Government of India will doubtless have its own gold coin of legal tender; but the English sovereign, whilst of proper weight, might be declared concurrent legal tender at the

intrinsic par of the two coins. This would greatly relieve the Indian mints from the immense coinage operations which would otherwise be necessary, whilst it would facilitate the arrangement above suggested, for utilising in England, the accumulations of gold during the four years of preparation for a gold currency for India. The operative department of the Paris Mint is worked by moneyers under contract, at a rate of 6·70 francs for each kilogramme of gold coined (3,100 francs), and 1·5 franc for each kilogramme of silver (200 francs). These moneyers, any similar classes in England, and the London Mint, might coin Indian gold coins at the charge of the Indian Government, for the firms entrusted with the above contract. Similarly, the silver tokens to be sent to India, by the Secretary of State, from his annual borrowing of 5 millions sterling, might be arranged by contract; or, as the German Government will have completed its coinage operations, and will have a large stock of silver for disposal, that Government might readily accede to an arrangement for coining the silver tokens for India in the German mints, at the cost of India, and on purchase of the silver from that Government.

58. The Indian mints would be restricted to coining the gold which may be imported from China, or which may be called forth from hoards in the country, and the silver tokens to be provided by a recoinage of part of the present currency. Thus the immense coining operations would be arranged without any strain on the Indian mints, gold would be accumulated without disturbing European markets, and at least five millions sterling a year would be added in the interval, to the silver coinage. Or, if 5 millions a year of gold could be obtained in India, the operation would be still easier.

59. Thus the coinage operation would be as follows, on the assumption, very probably an overestimate, of 130 millions sterling as the amount of silver currency in British India, *viz.* :—

1*st.*—The 130 millions of existing silver currency would be replaced by 60 millions of gold coins, and 70 millions of a silver token coinage, and there would be an extra issue of 30 millions of tokens.

2*nd.*—As a fundamental preliminary measure, the existing seignorage of two per cent. would be increased to ten per cent. on the coinage of silver, thus raising the price of silver (and conversely reducing the price of gold) in India, from a rate now represented by 56 pence an ounce of standard silver in London (or 57·12 pence in India, including two per cent. seignorage) to 61·6 pence in India.

3*rd.*—Next, a temporary double standard would be adopted in India, in a modified form, for the purposes of foreign exchanges, by Government receiving gold for four years, at a relative value with the rupee of 1 to 15·5867, which is equal to a price of 60½ pence an ounce of standard silver, and which, when the market price of silver is 55 pence an ounce, will give a seignorage of ten per cent. on a new silver token coinage, the silver token being rated (as subsidiary coin) with the new gold coin at a price of 60½ pence an ounce. The gold which would be received by Government would be retained till a store of 60 millions sterling of gold coin shall have accumulated in four years.

4*th.*—By accumulating gold at a relative value with silver of 60½ pence an ounce, and rating the rupee valuation of the gold coin at that price, on its introduction as sole legal tender four years hence, the undue depreciation of silver, which has occurred of late years, will be corrected, as regards transactions and engagements of every kind; but not the less will it remain a fact that the rupees now circulating in India contain silver which, in the European market, is worth only 56 pence an ounce, and which, four years hence, will not be worth 55 pence if silver were to continue as legal tender in India.

5th.—Accordingly, on the introduction of a gold currency, the existing silver rupees may be bought with the new gold coin, and so be withdrawn from circulation, at a price of 55 pence an ounce.

60. The financial result of the coinage operation may now be estimated; but first it may be observed that a rupee ceases to be legal tender when it has lost more than 2 per cent. in weight, and that it may be roughly assumed that the rupees in circulation have, on an average, or all round, lost one per cent. in weight—

1st.—The 60 millions of gold will have been obtained at a valuation with silver of 1 to 15·5867, which is equal to 60½ pence an ounce; and the silver to that amount, which would be withdrawn on the introduction of a gold currency, would be received at 55 pence an ounce, which is equal to a relative value of gold, with silver, of 1 to 17·1453. In other words, 60 millions of gold would withdraw 66 millions of silver, leaving on hand a surplus of 6 millions bearing a price of 60½ pence an ounce.

2nd.—Of the 60 millions (*plus* 6 millions) withdrawn, 30 millions would be reissued as tokens, at a profit of 3 millions, leaving for disposal 30 millions of principal amount and 3 millions of profit, in silver, valued at 55 pence an ounce.

3rd.—The proceeds of 20 millions of gold employed in London during the five years of preparation in buying silver, say at 56 pence per ounce on an average, will have been issued in India, as silver tokens to the amount of 23·314 millions sterling at a profit or seignorage of 10 per cent., or say 2⅓ millions, which would be remaining in silver, at a price of 56 pence an ounce. But against this issue 20 millions sterling of old rupees would remain to be withdrawn at 55 pence per ounce.

4th.—Other 50 millions of silver tokens will have been issued in India, by recoinage of old rupees, at a gross profit, or seignorage, of 10 per cent.; but the withdrawn rupees may be assumed to have lost one per cent. in weight, thus making the gross profit 9 per cent., or 4½ millions sterling, in silver, at a price of 55 pence an ounce.

61. The preceding would give, as silver on hand, from principal amount and as profit,—

		Price per ounce.	Silver on hand.		At 50 pence an ounce.	
			Principal amount.	Profit.	Principal amount.	Profit.
Paragraph 60	Clause.	Pence.	Millions. £	Millions. £	Millions. £	Millions. £
	1	60½	...	6	...	4·95
	2	55	30	3·	27·27	2·73
	3	55 and 56	20	2·33	18·12	2·08
	4	55	...	4·5	...	4·09
			50	15·83	45·39	14·55

It is assumed in the foregoing calculation that the price of silver would fall in the next four years from 56 to 50 pence, and that thereby there would be

a loss to Government of 4·61 millions sterling in disposing of 50 millions sterling of silver, which would be withdrawn from the coinage, while there would be a gross profit on the issue of a token coinage of 15·83 millions, but that this would accrue in the form of silver, the sale of which at 50 pence an ounce would reduce the profit to 14·55 millions, against a loss, under the first head of 4·87 millions, thus giving a net gain of 9·94 millions.

62. But certain items of charge have to be reckoned—

I.—The interest on the loan of 80 millions sterling, to be taken in yearly instalments of 20 millions, should be charged to the account of the coinage operation. Assuming that the subscriptions to each year's loan would be called up in quarterly instalments, the aggregate interest for four years, on the 80 millions, would be 7·1 millions at 4 per cent. per annum.

II.—The 20 millions sterling of silver tokens, to be coined in Europe, and sent to India, will have cost about 1¼ per cent. for freight and insurance, and there would be a similar charge for disposing of 50 millions of silver coinage withdrawn from circulation, which would have to be sold in London. The aggregate charge on 70 millions sterling, at 1¼ per cent., would be £875,000.

III.—The 60 millions of gold coinage to be sent to India would, at 1 per cent., cost another £600,000.

63. Altogether, the gain (paragraph 61) would be 9·94 millions sterling, and the charges (paragraph 62) would amount to 8·575 millions, leaving a final gain of 1·365 millions. But certain abatements have to be made from the charge—

1*st*.—As shown in paragraph 55, the gold which will have been accumulating in England during the four years of preparation would be employed on interest, which may be moderately estimated to yield 2 per cent. if the Government has to borrow at 4½ per cent, or 1½ per cent. if the Government borrows at 4 per cent.; that is to say, one-fourth of the interest charge of 7·1 millions at 4 per cent. estimated in paragraph 63, would not be incurred, to the amount of 1¾ millions.

2*nd*.—One effect of the measures discussed would be that India would cease to import foreign silver for coinage, immediately on entering on the four years of preparation for a gold currency; and silver having been demonetised outside Asia, the mines would cease their yearly production. The mines work within a margin of profit so small, that the cheapening of quicksilver was necessary for the reopening of mines which had been formerly closed as unprofitable. A cessation of demand in Europe, the closure of a market in India (the only country in Asia which now offers a fixed price for silver), and a heavy fall in the price of silver, continued for another four years, must have the effect of shutting up many of the mines and checking fresh production till the clearance of the heavy stocks or enormous hoards in Europe. Should the production of the mines temporarily cease, and if France, Austria, and the United States, reduce their gold coinage, and extend their silver token coinage by enlarging the limits of legal tender for the latter,—thus absorbing a large part of the existing hoards of silver,—it is possible that the market for silver may be eased by 1880 so as to afford a better price for silver than the 50 pence per ounce which has been assumed. Or if it be probable that the price will fall considerably below 50 pence, then Government would have to increase the seignorage, and five years hence, to call in the rupees now in circulation at less than the 55 pence per ounce assumed in paragraph 62.

Per contra.—Certain other charges have to be added, *viz.*:—

3rd.—The expense of coining, in Europe, 60 millions sterling of gold, and 20 millions sterling of silver; and the similar expense of coining in India. The cost of the gold coinage would be inconsiderable. The London Mint authorities estimate the cost of striking a large number of sovereigns at about a third of a penny (·311 penny) each sovereign of 240 pence or ·013 per cent., which is an inappreciable expense. The silver coinage of 20 millions sterling in Europe would cost more, but still not much (¾ per cent.), see paragraph 57; and the token coinage in India would be still larger;—but the aggregate amount would yet be very small, compared with the large sums now under consideration.

4th.—There would be expense in bringing the existing rupees to the mints from the interior for recoinage, and in sending back silver tokens, in exchange to the treasuries; but the greater part of this expense would be by railway, and would perhaps not amount to one per cent., of which one-half would be recovered as net traffic earnings on lines of railway which do not pay 5 per cent. (paragraph 50).

5th.—On the whole, the saving in interest of 1¾ million sterling (clause 1) would exceed the expense of recoinage and of transport of coin; and the excess on this head would increase the gain of 1·365 million sterling first mentioned.

64. The coinage operation for which 80 millions sterling will have been borrowed would result in an increase of the metallic currency, and as the Government's issue would be in exchange for a full equivalent, the means would be forthcoming at the end of the operation for repaying the loan of 80 millions.

65. Loss by exchange which is incurred on the Secretary of State's bills on India may be estimated at 1½ million sterling a year. During the four years of preparation for a gold currency, his drafts on India for Home charges would cease; but in the coinage operation he would sell bills to the amount of 15 millions sterling on India, for deposits of gold in England, at an exchange between gold and silver of 1 to 15·5867, which is equal to a price of 60½ pence an ounce for standard silver, and to an intrinsic par with the rupee of 22·483 pence. This would give a loss of about £950,000 a year, in round numbers, against £1,500,000—or a saving of £550,000 a year, which for four years would amount to £2,200,000. Adding this to the saving of 1·365 million mentioned in paragraph 63, the total saving would be 3·565 millions; so that the operation would be effected at an aggregate saving of above £800,000 a year for four years. But as the Secretary of State would obtain a better rate than that above assumed, the saving would be greater.

66. The fundamental parts of the operation would be—

1st.—An increase of the rate of exchange between the rupee and sterling, that is of the price of silver in India, by 8 per cent., or from a price of 56 pence an ounce to about 60½ pence an ounce, by raising seignorage from 2 to 10 per cent. This can be brought to a practical test, by raising the rate before proceeding with the rest of the arrangements.

2nd.—The borrowing of 80 millions sterling in four years. There would be nothing stupendous or startling in this. The credit, and the financial position, of Russia are not so good as those of British India; yet Russia borrowed, with ease, 15 millions sterling a year for three years, and 12 millions in each of two other years, or, in all, 79 millions in five years, although the prospect of repayment of the principal is indefinite, whereas India would repay the whole loan in five years. Furthermore, the discredit into which the minor foreign loans have lately fallen

has improved the estimation in which Indian stock is held in the London market; and, again, by the mode in which the loan would be employed, the greater part of the money would not be withdrawn from Europe for four years,—all which considerations render the facilities for borrowing far greater for India than those which Russia enjoyed.

3rd.—The gradual storing of 60 millions sterling in gold for nearly four years. The Bank of France has locked up more than 62 millions sterling in gold since 1870, without distressing the markets in Europe, and special sources for the supply would be available.

4th.—The employment of European mints for the greater part of the new money. India coins for Ceylon and the Straits Settlements; and, with the contract system which obtains in Europe for the employment of moneyers, this would present no difficulty. In a paper read before the Statistical Society in February 1870, Mr. Seyd stated that the London mint can easily turn out 30 millions sterling per annum.

5th.—The issue of the new silver token coinage by the side of the existing rupee. The precedent on the introduction of the existing Government rupee shews that this would not cause disquiet among the people, nor tend to confusion.

6th.—The employment of the Banks of England, France and Prussia, and of wealthy firms which are as safe as the Bank of England, for holding in Europe 60 millions out of the 80 millions which it is suggested should be borrowed for the coinage operation. The Governments of France and Germany did not hesitate to employ such agency for the payment and receipt of the enormous war indemnity, and many millions sterling of that indemnity were for a long time held for the German Government by one of the London Banks.

67. It is highly probable that so much as 60 millions sterling of gold currency will not be required for India. If India had no foreign trade, the depreciation of silver abroad would not affect her in a way to call for any change of the silver currency which is well suited to the mass of retail transactions in the country. But the large foreign trade of India gives a market for her produce which has immensely promoted her material progress in the past twenty years; in other words, that foreign trade, though bearing a comparatively small proportion to the home trade, has yet acted upon prices in India, throughout the length and breadth of the land. It is through the range and influence of this foreign trade that the depreciation of silver abroad would have a disastrous effect on prices in India; and, accordingly, the amount of a gold currency for India need not be greater than that required for settling the balance of this foreign trade. This balance is in favor of India, and, accordingly, if Indian currency be once provided with a sufficient supply of gold coin, there would never be an actual exportation of gold from India. The mere knowledge that importers in India, and the Government in this country, had the means of sending gold to England would induce Banks and others in England to buy the bills issued on India by the Secretary of State, and by exporters from England, at an exchange, within the margin of cost of sending gold from India, such as would prevent an actual exportation from India. This being the case, and as gold coin would circulate in India, principally at the Presidency towns, and at large commercial centres of entire provinces, such as Patna for Behar, and Cawnpore and Lucknow for Oudh, Bareilly for Rohilcund, Benares, Cawnpore and Mirzapore for other parts of the North-Western Provinces, Surat for Guzerat, and the like,—the estimate of 60 millions sterling for the new gold currency is perhaps too high; and it would be prudent to underestimate rather than overestimate the first issue of gold coin. To whatever extent the requirement may be cut down, in the same degree the financial result would be improved, because there would be so much

less to borrow, and so much less of gold to coin free of expense for seignorage. At the same time, with the smaller requirement the demand on the European market for money and for gold, and the coinage operations, would be less.

68. With a gold currency in India the cost of remitting 15 millions sterling a year for home charges need never exceed the cost of sending gold from India to England, that is, seven-eighths or one per cent. But, owing to the constant balance of trade in favor of India, the Secretary of State's bills would command a premium, so that, instead of the transit expense of one per cent., there would be a gain from the remittance. The accounts, however, would still show a loss by exchange, for the reason that the (nearly) 1½ million sterling of loss by exchange in the estimates for 1875-76 is, to a great extent, a merely nominal loss, from the fact of the rupee being turned into sterling at two shillings. In India, all the revenue accrues, and all the local expenditure occurs in rupees,—and thus there is a large local surplus in rupees, which we may term A. Out of this surplus the home charges are met;—these charges are incurred in sterling;—and the money for meeting them is raised by bills on India, on which more than 10 rupees are paid in India for every pound sterling received on those bills in England. The amount of the home drafts does not exactly coincide with the amount of home expenditure, for the Secretary of State, besides meeting the home charges proper, has a banking account with the British and Colonial Governments, with Guaranteed Railway Companies, and in certain other ways; often too, in the past, he has borrowed money in England for the expenses of the Government in India. His drafts upon India are accordingly for the amount of the home charges, *plus* or *minus* the net result of his banking transactions and his borrowings. Still, in whatever form arising, the having to pay more than 10 rupees in India for every pound sterling received in England, diminishes to that extent the cash of the Indian Government, and forms a charge on the revenues of India, which is entered in the accounts as loss by exchange, and which may be termed B.

69. Hence, the final account, in which the ultimate result of surplus or deficit is struck on the revenues and charges of India, includes—

In the Indian accounts.	*In the Home accounts.*
A.—Local surplus of rupee revenue over rupee expenditure (not deducting loss by exchange). These rupees, less loss by exchange, are turned into sterling at two shillings.	C.—The amount of home charges, incurred entirely in sterling, and stated in sterling without the intervention or employment of any rate of exchange between sterling and the rupee.
B.—Loss by exchange, *viz.*, the difference between the average rate of exchange on the Secretary of State's bills, and two shillings per rupee, as made up of—	
I.—The difference between two shillings the rupee and the intrinsic par between the rupee and the shilling, as rated at the price of silver in London.	
II.—Minus the rate above that intrinsic par, which is obtained on the Secretary of State's bills.	

Were the sterling or home accounts to be turned into rupees, in order to be set against the local surplus which accrues in rupees, the conversion would be made perhaps at the average rate of exchange obtained on the home bills, and then the item B would disappear. The net result, whether surplus or deficit,

would, in that case, differ from the true result to the extent of the loss by exchange on the *plus* or *minus* difference between the amount of bills drawn by the Secretary of State and the amount of his home charges. But the opposite course is pursued, and the local rupee surplus (A) is turned into sterling, and is then set against the home charges (C), which are stated in sterling, without the employment of any rate of exchange between the rupee and sterling. The local surplus A is turned into sterling at 2 shillings the rupee, and is thereby exaggerated;—and, as a set-off, the loss by exchange on the Secretary of State's bills is deducted from that overstatement of the local surplus. The net result brought out necessarily deviates from the true result by the excess of 2 shillings the rupee over the average rate of the Secretary of State's bills on India, as reckoned on the *plus* or *minus* difference between the amount of local surplus and the amount of the Secretary of State's bills. In years of borrowing in England, when the home bills on India are of small amount, the local surplus, and necessarily the ultimate surplus on the ordinary account, are overstated—a fact which should be regarded in comparing the surplus in past years, when the amount of home bills was comparatively small, with the surplus now, when the amount is much greater.

70. With the introduction of a gold currency the deviation from the true result would be reduced, but there would still be a nominal loss by exchange. For, as has been seen, in rating the gold coin, for the Indian currency, a price of 60½ pence an ounce, for standard silver, might be adopted, whereas an intrinsic par of 2 shillings, between the rupee and the shilling, implies a price of 66 pence an ounce for standard silver; so that if the local surplus be turned into sterling at 2 shillings the rupee, it will be overstated by 6⅓ per cent., and this exaggeration of the real local surplus must continue to be set-off, as in B I, by a nominal loss by exchange to that extent, less, however, any advantage under B II.

71. But, putting aside the amount of loss by exchange, as stated on a basis of 2 shillings the rupee, the real loss by exchange, arising from the depreciation of silver, may be reckoned at the difference between a price of silver per ounce of 60½ pence, and a price, say, of 56 pence per ounce. This difference of 4½ pence per ounce gives 7·4 per cent. on the price in 1860. To this may be added ⅜ per cent. of diminished cost of sending gold to England, instead of silver, and the ¾ per cent. of reduced transit charge for silver, between England and India, out of a total reduction of two per cent., which the buyers of the Home bills have retained in excess of their share owing to silver being depreciated in London (paragraphs 16 to 20). In all, say, one per cent. might be added, making the gross saving 8·4 per cent. Assuming 15 millions sterling a year for the Secretary of State's bills, for the future the real loss from depreciation may be estimated at £1,260,000 a year. But, on the other hand, the Secretary of State would lose a present advantage of 2 per cent. seignorage on silver: this would reduce the saving by £300,000, or to £960,000 a year. A further fall of 5 pence per ounce of silver would represent another 9 per cent. of loss on 15 millions sterling, or 1·35 million additional, making a total loss of 2·31 millions a year. Considering the rate of annual production of silver, *viz.*, 18 millions sterling, the enormous hoards of silver which have accumulated in Europe, and the certainty that, with silver demonetised outside Asia, and with India as the only country in Asia which offers a fixed price for silver, those hoards, and that large annual production, must be attracted to India, if silver continues legal tender, a further fall, to a much larger extent than 5 pence an ounce, must be expected, and, accordingly, a loss by exchange of even 2·31 millions sterling a year may fall far short of the ultimate loss.

72. Nor would this be the sole loss. It has been shown in Appendix E that with a further depreciation of silver, the customs revenue of £800,000 a year for cotton goods must be seriously imperilled; that the net revenue from opium will be reduced through an increased cost of production, unaccompanied by an increased selling price; that the existing land revenue settlements will be endangered, and would have to be revised, in order to reduce the assessment; that the rate of interest at which the Government borrows for public works extraordinary would rise; that salaries and military expenditure must be

increased; and that these augmentations of the public burdens, necessitating an increase of taxation, would fall on a country which will be disabled from meeting the additional pressure, by the injury to commerce, production, and industry, that must result from an inflation of prices at home, through a depreciated currency, which necessarily will not be accompanied by any increase of prices abroad.

73. Nor—(including in our regard the interests of Europe which are those of the world)—should we forget that the annual production of gold will, after 1879, yield a surplus over ordinary requirements of 14 millions sterling; that unless Asia absorbs part of this surplus, it cannot be absorbed in Europe, America, and Australasia, without revolutionising prices, and causing a derangement of production and industry similar to, but far more extensive than the results to be apprehended from the depreciation of silver in India.

74. It remains to notice certain stereotyped objections to a gold currency for India, *viz.*:—

1*st.*—*That the rupee loans were contracted in silver, and that faith should be kept with creditors.* The creditors themselves would plead that faith should be broken with them, and that, preferably, the promissory notes which they hold should be renewed for others promising to pay precisely the same amount of rupees in gold coin, of legal tender in India, which shall have been rated with the rupee on the basis of a price of 60½ pence per ounce of silver. Those who might refuse this arrangement would find out their mistake on Government buying silver, with gold, at 56 pence an ounce, and discharging the rupee loans.

2*nd.*—*That under the permanent settlement in Bengal, and a part of the North-Western Provinces, the land revenue is payable in silver, and that faith should be kept with the zemindars.* It is shown in Appendix A, that, at the date of the permanent settlement, gold was legal tender concurrently with silver, and that it was rated at 1 to 14, and afterwards at 1 to 15. Accordingly, with a rating of the new gold coin at 1 to 15·5867, the zemindars would have an advantage over the rating at the time of the permanent settlement; and the alteration to a gold standard, at that rating for the gold rupee, would simply deprive the zemindars of the opportunity of benefiting by only such further depreciation of silver, in the future, as the Government could not rectify by an increase of seignorage. The Government, in altering the currency of the country, on considerations of general policy, would not be required to provide compensation for a prospective advantage to zemindars who, in the past, have immensely benefited by an improvement of the value of their estates, through the mere progress of events, and without any effort or outlay on their part. In respect of that improvement, the Government has not taken anything from the zemindars. The obligation of Government under the permanent settlement is simply that the assessment shall not be increased by reason of any improvement of the estates of the zemindars, and that the settlement is to be interpreted in a fair spirit. An adjustment of the gold currency in the manner suggested would be in perfect accord with that spirit; and, lastly, a rigidly literal interpretation of the permanent settlement would injure the zemindars.

3*rd.*—*That a double standard of gold and silver is necessary for the period of transition from a silver to a gold standard, and that, for the period of its operation, the cheaper metal would expel the dearer.* The particular form of double standard, suggested in this paper, is not open to this objection.

4th.—That by altering the standard from silver, which is falling in value, to gold, debtors, instead of being able to pay in the cheaper metal, will have to pay in the dearer. A large proportion of these debtors incurred their debts when silver was dearer than it is now, and the rating of the new currency on the basis of a price of 60⅓ pence an ounce of standard silver, pretty fairly hits the normal price of silver before the undue depreciation of it, by which creditors are suffering in a way not contemplated in the engagements between the debtors and creditors. Moreover, no such theoretical objections have been allowed to hinder the alteration of standard from silver to gold, in other countries, when the change was found necessary on the weightiest considerations of the public weal. And again, it would not profit the mass of debtors, if they were allowed to pay their debts in depreciated silver, for, with regard to the mass of debts in a country, there is but one way of paying them, namely, out of income; and the net income of the debtors would, through the rise in local prices, be reduced by the depreciation of silver, if it were allowed to continue as legal tender.

75. The substance of this paper, and of its Appendices, may be summarised under the heads of—1*st*, production and sufficient supply of gold, and the advantage of adopting it as the standard of value; 2*nd*, the disadvantages of continuing silver as the currency of India, *viz.* :—

GOLD—

1*st*.—Countries which, heretofore, had a silver currency, but a large adverse balance of trade with other gold using countries, and which borrow largely from the gold coin countries, have experienced a heavy loss in making their remittances to the latter countries;—on which account, and from the increasing fall in the price of silver, they have found it to their advantage to alter to a gold standard. With every fresh adhesion of a country to a gold standard, the necessity which presses on the remaining silver coin countries to conform to the general custom of the civilised world, and adopt gold as the sole standard of value, is becoming more urgent—(Appendix A).

2*nd*.—The annual production of gold may be estimated at 23½ or 24 millions sterling, according to the latest information for past years, *viz.*, in the United States 8·9 millions, in Australia 10·5 millions, and in Russia 4·2 millions, total 23·6 millions, exclusive of gold which leaves Australia and the mines in California, without being reported to the official sources of information. Apart from the gold thus left out of the reckoning, the amount for the United States is underestimated by about one million—(Appendix C, paragraph 175). Moreover, from improvements in quartz mining and discoveries of new quartz reefs, and from discoveries of gold in new regions in Africa, an increase of production may be expected.

3*rd*.—The annual production in the past, of 24 millions sterling, since 1851, vastly exceeded the ordinary requirements of the countries which, at the date of the discoveries of gold in California and Australia, had gold currencies. The absorption of the immense extra supplies from the diggings would have revolutionised prices, and produced the calamitous results which were apprehended by M. Chevalier. Fortunately, however, a double standard existed in the United States and France, and in 1853 a demand sprung up for the exportation of silver to the East. This raised the price of silver in Europe and the United States, above the price at which it was rated in the double standard of France and of those States. Accordingly, gold was imported into France and retained in the United

States, and silver was exported thence. There were similar exports of silver from Belgium and Italy in exchange for gold; and more recently, from the pressure of the causes or circumstances stated in clause 1, Germany, Holland, Belgium, and the Scandinavian Kingdoms, laid in large amounts of gold for the change from a silver to a gold standard. Owing to these special demands, the balance of the annual production of gold was reduced to an amount which harmonised with the ordinary annual requirements for gold, and thus the revolution in prices, once seriously apprehended, was averted—(Appendix C).

4th.—But the production of gold still continues at 24 millions sterling a year, whilst the ordinary requirements for replacing wear and tear of coinage, for an increase of metallic currency commensurate with an increase of trade, and for use in the arts, will not probably exceed 10 millions sterling a year, when the countries which are altering to a gold standard shall have completed the change. There will then be an annual surplus of 14 millions sterling, which, unless absorbed in some special way, must revolutionise prices. The special demands which absorbed a similar surplus from 1853 to 1866 (clause 3) will not recur, as, after 1878, there will not be any more countries in the West, needing to change from a silver to a gold standard. Moreover, the demand for silver from the East, on the enormous scale which obtained from 1853 to 1866, has ceased, so that an outlet cannot be found, in the East,—except with disastrous results to the East—for an amount of silver equal to the future annual surplus of the gold production,—superadded to the absorption of the hoards of silver which have accumulated in Europe—(Appendix C).

5th.—Hence, a revolution in prices in Europe, that is, in the commerce of the world, is inevitable, unless the annual surplus of gold can be absorbed in Asia, and more especially in India —(Appendix C).

SILVER—

6th.—The annual production of silver is estimated at 18 millions sterling; some writers would fix it at a larger sum. In the 14 years, from 1853 to 1866, a sum equal to the total production of silver in that period was absorbed in the East, and on that account, and by reason of the demand for silver in several countries in Europe which used a silver currency, the price of silver ranged higher from 1853 to 1866, than either before or since. After 1866, *(1st)*, the immense export of silver to the East ceased; *(2nd)*, the amount of the Secretary of State's bills on India increased, and it had the effect of reducing, to a corresponding extent, the demand for silver; *(3rd)*, the indebtedness of the United States and Great Britain to China decreased, with another diminution of the demand for silver; *(4th)*, Germany, Holland, Belgium, and the Scandinavian Kingdoms, discontinued their demand for silver, by the alteration to a single gold standard which has been decided upon or completed, whereby, and from the use of an inconvertible paper currency in certain other countries, silver is now completely demonetised outside Asia; (*5th*), the production of silver increased. From these causes, *viz.*, an enlarged production, and a greatly diminished demand,—*1stly*, the price of silver has fallen 7 per cent. below the lowest price since 1835; *2ndly*, enormous hoards of silver have been accumulated in Europe, the sale of which, though withheld hitherto, cannot be much longer deferred; *3rdly*, a consequent additional fall in the price must be expected—(Appendix C).

7th.—The effects of this fall will be disastrous to India, if she retains a silver currency, because, in that case, India will be the only

country in the East which will offer a fixed price for silver, irrespectively of its depreciation abroad; and so long as she offers that fixed price, the mines will continue to work, and will flood India with depreciated silver—(Appendix D).

8*th.*—The annual production of the silver mines, and the hoards of silver in Europe, would be imported into India as merchandise, in exchange for exports; and as the exports, thus exchanged for silver, would not be available for separate exchange, also, with imports of merchandise, and for separate provision of the means for the Secretary of State's drafts on India, additional exports must be offered by India, necessarily at a lower selling price abroad, for these two objects. On the other hand, local prices, both for the production of exports and for the consumption of imports, will rise, thus restricting the foreign trade, other than the trade comprised in the interchange of cheap silver for exports—(Appendix D).

9*th.*—With a diminished foreign trade the means of providing for the remittances for home charges will be contracted, and in this view the probable extinction of the export trade in Indian cotton (Appendix B) must cause especial disquietude, in its bearing on the present subject. At the same time, the low exchange of the rupee, with sterling, will operate as a bounty on exports,—giving to that trade an unhealthy stimulus, —and as a heavy duty on imports, such as must cause a collapse of the imports of cotton goods. Even now, the heavy loss by exchange is such as to make all the difference to Manchester, between a paying and a losing business, upon which India depends for £800,000 a year of her customs revenue—(Appendix E).

10*th.*—Hence, and as set forth in detail in Appendix D, the results of the fall in the price of silver, should that metal continue as legal tender in India, will disorganise the finances and industry of the country, and put a stop to some of the projects for irrigation and railways which are designed to promote her material progress, and to provide security against famine.

11*th.*—The means of averting these calamitous results seem to be within the reach of Government. An increase of seignorage from 2 to 10 per cent. would raise the exchange, and consequently the price of silver, to that extent; that is, it would raise the price of silver in India from 56 pence an ounce, to 60½ pence an ounce; in other words, it would reduce, to the same extent, the price of gold in India.

12*th.*—But though this remedy can be applied now, with immediate beneficial effect, yet it will not do to rely on further increases of seignorage for meeting all further depreciation of silver; for from the large annual production, and from the immense hoards of silver which are accumulated in Europe, the price may be expected to decline to a point at which any corresponding percentage of increase of seignorage would tempt spurious coinage.

13*th.*—At the same time the effect of a 10 per cent. seignorage, in restoring the price of silver in India to a rate of 60½ pence an ounce, will undo the effects of the undue depreciation of silver of late years, and will enable Government to introduce a gold currency as the sole legal tender in India, by rating it with the silver rupee on a basis of 60½ pence per ounce of silver, and then demonetising silver.

14*th.*—It would, of course, be necessary to provide the full amount of gold coinage for completing the change, before issuing a single gold coin as legal tender; but the measures for accumulating gold, and for coining a new silver token currency, could be

completed in four years, without any strain on the finances of India, or on the mints in this country; on the contrary, a large annual gain would accrue from the coinage operation, and a considerable permanent saving in the item of loss by exchange.

76. Perhaps the considerations which have been urged will, on their merits, induce a conviction that by retaining silver as the future currency of India, the finances, and the material progress of the country, will be irremediably injured; and that, on the other hand, great financial advantages to India, and commercial good to this country and to the world, will follow from the adoption of a gold currency in India. Still, it may be allowable to support these considerations by the example of European States. It could not have been on mere theoretical arguments, or from a fanciful desire for change, but from overpowering conviction of the urgent need for demonetising silver, that the hard-headed, acute, far-seeing statesmen of Germany, and the Government of Holland, which is proverbial for its caution, determined to adopt a single gold standard, and that the Scandinavian kingdoms, after a careful, searching, and extensive investigation of the subject by competent enquirers, arrived at the same conclusion as Germany, for reasons which are ably stated in Appendix A, in extracts from a report on Scandinavian currency reform.

77. The question whether silver or gold should be the proper currency for a country whose foreign trade is chiefly with gold-coin countries, has been repeatedly decided (see Appendices) in favor of gold; the geographical position of a country does not affect the question; and the principles which have been accepted as furnishing a correct answer to the question in Europe, where silver is virtually demonetised, are of equally full and sound application to the same question in Asia. The postponement of a change to a gold standard will not arrest the evils which are in progress from a growing depreciation of silver, while the longer that a change to a gold standard is delayed, the more difficult and expensive, but not the less inevitable, will it prove in the end.

The 7th September 1875. R. H. H.

APPENDIX A.

CURRENCY IN INDIA, IN GREAT BRITAIN, AND IN COUNTRIES WHICH HAVE CHANGED, OR ARE ABOUT TO ALTER, THEIR STANDARD OF VALUE, OR TO RESUME SPECIE PAYMENTS.

	PARAS.
EAST INDIES—	
1. Existing silver currency	1
2. In 1793 and previously the sicca rupee was the established silver coin of the country, and the rupee in which the public revenues were payable	2
3. At the same time, the Regulation of 1793, in which the foregoing statement occurs, recited that gold coin had in 1766 been declared a legal tender of payment at a fixed relative value to the silver rupee; but that in the valuation of 1766 the gold mohur had been overvalued, and that accordingly a new gold mohur was struck in 1769, and was regulated so that "the intrinsic worth of the coin was estimated to be equal to the nominal value of it, or as nearly so as was deemed necessary to render it current at the prescribed rate." Lastly, the Regulation of 1793 fixed the relative value of the gold to the silver coin at 1 to 14·861 ...	3
4. Regulation XIV of 1818 reduced the standard of the gold mohur and the sicca rupee, and altered the relative value from 1 to 14·861 to 1 to 15; at this latter valuation the gold mohur continued a legal tender for all payments until 1835	4 & 5
GREAT BRITAIN—	
5. Fineness and weight of the sovereign and the shilling, and table of intrinsic par between the shilling and the rupee at various prices of silver in London	6 & 7
UNITED STATES—	
6. Fineness and weight of the various gold and silver coins	8
7. All silver coins except the dollar were demonetised in 1853, and the dollar was demonetised in 1873, when a new trade dollar was struck exclusively for foreign use	9 to 11
8. Until 1873 the intrinsic par between the gold eagle or ten-dollar piece, and the sovereign was struck after deducting the United States' mint charge for seignorage, *viz.*, at £1 = 4·84 dollars; since that year it has been reckoned without deduction of seignorage, *viz.*, at £1 = 4 $ 86 c. 6½ m.	
FRANCE—	
9. Fineness and weight of French coins	14
10. Silver coins, except the five-franc piece, were demonetised in 1867 in a monetary convention with Belgium, Switzerland and Italy. The relative value of gold to silver is 1 to 15½	15 & 16
11. By the convention of 1867, the abovementioned countries are bound to strike coins precisely identical in weight, fineness and legal value, and to give currency to the five-franc piece at the relative value with gold of 15½ to 1	17
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APPENDIX A.

CURRENCY IN INDIA, IN GREAT BRITAIN, AND IN COUNTRIES WHICH HAVE CHANGED, OR ARE ABOUT TO ALTER, THEIR STANDARD OF VALUE, OR TO RESUME SPECIE PAYMENTS.

EAST INDIES— EAST INDIES.

1. SILVER—(11/12 *ths fine*)—

	Pure. Grs.	Alloy. Grs.	Total Grs.	
Double Rupee ...	330	30	360	Legal tender in satisfaction of all engagements.
Rupee ...	165	15	180	
Half Rupee ...	82½	7½	90	
Quarter Rupee ...	41¼	3¾	45	Legal tender only in payment of a fraction of a rupee.
One-eighth Rupee ...	20⅝	1⅞	22½	

The Company's (now Government) rupee of the above weight and standard was introduced by Act XVII of 1835 in supersession of the previous sicca rupee which contained 176 grains of pure silver, and the Act directed that the new rupee should be received as equivalent to fifteen-sixteenths of the Calcutta sicca rupee; "provided that if in any contract for the payment "of Calcutta sicca rupees it shall have been specially stipulated that, if "payment be made in the territories of the Madras, Bombay, or Agra Pre- "sidency, it shall be made in the rupee now current in those Presidencies" (which rupee was equivalent to the new) "at a different rate from that above "provided with reference to the Calcutta sicca rupee, the contract shall be "satisfied by payment within those Presidencies of Company's rupees of the "amount of Furruckabad, Madras or Bombay rupees so specially stipulated. "Provided also that if payment of the principal or interest of the public "debt be made for the convenience of creditors at any public treasury other "than as stipulated in the notes and engagement of the Government, it shall "be competent to the Government to make such payments at the same "exchange as heretofore."

2. The following passages occur in the preamble of Regulation XXXV of 1793: "The principal districts in Bengal, Behar and Orissa have each "a distinct silver currency, consisting either of the nineteenth sun sicca rupee, "or of old or counterfeit rupees of different suns or years, coined previous or "subsequent to the Company's administration, which are the standard measure "of value in all transactions in the districts in which they respectively "circulate." After stating the confusion and loss to ryots attendant on these diverse currencies, the recital proceeded: "The sicca rupee of the nineteenth "sun is the established silver coin of the country, and the rupee in which the "public revenues are payable. It was with a view to render it the general "measure of value that Government determined, in the year 1773, that all "rupees coined in future should bear the impression of the nineteenth sun or "year of the reign of Shah Alum, and no other species of rupee (with the "exception of some Arcots) has since been coined in the Calcutta Mint." The Regulation then enacted measures for superseding all other silver currency in Bengal by the nineteenth sun sicca rupee.

3. The Regulation next proceeded to state that "the rules by which the "gold coin has been regulated have been productive of evils similar to those "which have prevailed with regard to the silver coin. Under the Native admin- "istration, and until the year 1766, the gold mohur was not considered as a "legal tender of payment in any public or private transaction, nor was the "number of rupees for which it was to pass current ever fixed by the Govern- "ment. It was struck for the convenience of individuals; and the value "of it in the markets fluctuated like other commodities, silver being the "metal which was the general measure of value throughout the country. "In the year 1766 the value of the gold coin with respect to the silver "was first fixed, and the former coin declared a legal tender of payment. "A gold mohur was struck, and ordered to pass for fourteen sicca rupees. "But as this coin (calculating according to the relative value of the two "metals) was much below the worth of the silver in the number of rupees

EAST INDIES —*contd.*

"for which it was ordered to pass, it was found impossible to render it "current, and it was accordingly called in, and a new gold mohur, being "that now current, was issued in 1769, which was directed to pass as a "legal tender of payment for sixteen sicca rupees. The intrinsic worth of this "coin was estimated to be equal to the nominal value of it, or as nearly so as "was deemed necessary to render it current at the prescribed rate." But from causes which need not be stated here the new gold mohur had but a restricted circulation beyond Calcutta. "The means which appear best calculated to "render the gold mohur generally current are to declare it receivable at all "the public treasuries, and in all public payments throughout the pro-"vinces, at the rate of sixteen sicca rupees; to make it a legal tender of "payment in private transactions; to coin a great proportion of halves and "quarters; and lastly, to impose a duty upon all gold bullion sent to the mint "to be coined, so as to prevent too large a proportion of gold being introduced "into circulation, by diminishing, in some degree, the advantage at present "derived from the importation of it in preference to silver. Upon the above "grounds, the Regulations of the 20th June, 24th October, and 21st November "1772 were adopted; and this detail of them, by apprising individuals of "the principles on which the coin of the country is regulated, will enable them "to guard against the impositions of the money-changers who alone derive "advantage from the want of a uniform gold and silver currency. The Regula-"tions abovementioned are hereby re-enacted with amendments—" whereby the relative value of the gold to the silver coin was fixed at 1 of gold to 14·861 of silver.

4. Twenty-five years later, the preamble of Regulation XIV of 1818 set forth that "the high standards established for the gold mohur and *sicca* rupee, "having been found productive of many inconveniences, both to individuals "and the public, inasmuch as they are ill calculated to resist the wear and "defacement to which the coins are necessarily exposed, and as they are "only to be obtained by having recourse to the expensive process of refining, "diminishing consequently the productiveness of most of the sorts of bullion "imported into the Company's territories; and it being desirable, also, "that as much uniformity as can be established between the currencies circu-"lating at the different Presidencies should be introduced, consequently "that an approximation of the standard of the Calcutta coins to the stand-"ard of those current at Madras and Bombay should be effected, it has been "resolved to rescind the provisions of former regulations relative to the "standard of the gold mohur and nineteenth *sun sicca* rupee, and to coin, in "future, money of the proportions hereafter to be specified.

"As a reduction of the value of the sicca rupee, from its being in a great "measure the money of account, both in private and public transactions, "would necessarily change the terms of all existing contracts, and might be "productive of embarrassment and trouble, it has been determined to leave the "rupee unaltered in this respect; and the new Calcutta sicca rupee will "consequently contain the same quantity of fine silver as that heretofore "struck, and being of the same intrinsic value, will circulate on the same "terms. The mint proportions of silver and gold being, it is believed, inaccu-"rately estimated at present, and it being also desirable that an uniformity "in this respect should be introduced at the three Presidencies of Calcutta, "Madras, and Bombay, it has been thought advisable to make a slight deduc-"tion in the intrinsic value of the gold mohur to be coined at this Presidency, "in order to raise the relative value of fine gold to fine silver from the pre-"sent rates of 1 to 14·861 to that of 1 to 15. The gold mohur will still "continue to pass current at the present rate of sixteen rupees." The old standard of gold coinage was 99¼ parts of pure gold to three-quarters of alloy, the Regulation of 1818, just quoted, altered this to 11½ths of pure gold to 1½th of alloy. But the older regulation which had declared the gold mohur a legal tender remained unaffected by the Regulation of 1818, and gold was not demonetised until Act XVIII of 1835 declared "that no gold coin shall hence-"forward be a legal tender of payment in any of the territories of the East "India Company."

GREAT BRITAIN—

5. GOLD : 22 carats or 916·666 fine ; *i. e.*, $\frac{22}{24}$ dwts., or $\frac{11}{12}$ths fine—

40 lbs. troy, of standard gold, are coined into 1,869 sovereigns, which gives—

1 lb. troy of standard gold coined into { £ 46-14-6 or 44½ guineas,

which gives—

1 oz. troy = { £ 3-17-10½*d.*, as issued from the mint. £ 3-17-9, as paid by Bank of England to the public.

1,869 sovereigns = 40 lbs. troy standard.

1 sovereign = { dwts. 5, grains 3·27449 or grains 123·2744 standard ×·916⅔ fineness.

1 sovereign = fine gold, 113·0015333 grains.

6. SILVER : 11 oz., 2 dwts., or $\frac{222}{240}$·or $\frac{37}{40}$ or ·925 fine.

One pound of standard silver is coined into 66 shillings, at the rate of 5*s.* 6*d.* per ounce. "Before 1816, when silver was legal tender to any amount, "the pound of silver was coined into 62 shillings, or at the rate of 5*s.* 2*d.* per "ounce, and this is still reckoned the standard price in the valuation of foreign "silver coin" (Kelly's Cambist). In the subsequent treatise, however, (Tate's Cambist) the rate of 60 pence per ounce is adopted for valuing foreign silver coins in sterling.

One pound of 5760 grains = 66 shillings, or 5*s.* 6*d.* per ounce standard,
87·2727 grains = 1 shilling,
× ·925 fineness of the standard silver,
80·727 grains of fine silver, per shilling, the pound of silver being coined into 66 shillings.

1		2	3	4	5	6	7	8	9
PER OZ. STANDARD. 480 grains standard, 444 ,, fine; in one ounce.		Value at market price of 80·727 grains of fine silver in a shilling.	Seignorage at British mint, (or making up preceding to 12 pence.	Percentage of seignorage on Col. 2.	Fine silver in 20 shillings' worth of standard silver at market price.	RELATIVE VALUE OF FINE GOLD IN A SOVEREIGN (113·0015333 GRAINS) TO SILVER.		1 RUPEE (165 GRAINS FINE).	SILVER BOUGHT IN LONDON AND SENT TO INDIAN MINT FOR COINAGE.
Price of standard silver in London.						At market price in London.	On fine silver in the coined shilling at market price.	Intrinsic value at London market price of silver.	Value in India at London price with all charges added.
s.	*d.*	Pence.	Pence.			Gold being	1 to	Pence.	Pence.
5	6	12·	...	...	1614·5454	14·288	14·288	...	25·5374
5	4	11·636	·363	3·12	1665·	14·734	13·855	23·7839	24·7636
5	3	11·455	·545	4·76	1691 4285	14·9082	13·638	23·414	24·3767
5	2	11·273	·727	6·45	1718·7097	15·2006	13 4219	23·042	23·9899
5	1	11·091	·909	8·19	1746·8852	15·4589	13·2055	22·67	23·6030
5	0½	11·045	·954	8·64	1754·074	15·5226	13·1518	22·5752	23·5062
5	0½	11·0004	·999	9·08	1761·3223	15·5867	13·007	22·484	23·4095
5	0½	10·954	1·045	9·54	1768·6307	15·6514	13 043	22·3892	23·3129
5	0	10·909	1·091	10·	1776·	15·7166	12·989	22·2972	23·2160
4	11	10·727	1·273	11·87	1806·1017	15 9829	12 772	21·9252	22·8291
4	10	10·545	1·454	13·79	1837·2414	16·2585	12·5550	21·5532	22·4422
4	9	10·364	1·036	15·78	1869·4737	16·5438	12·339	21·184	22·0552
4	8	10·182	1·82	17·87	1902·8571	16·8392	12·123	20·812	21·6684
4	7½	10·091	1·91	18·92	1920·	16·9909	12 015	20·626	21·4747
4	7	10·008	1·992	19 9	1937·4545	17·1454	11·907	20·456	21·2813

Column 6 shows the relative value of gold to silver as reckoned, weight for weight, on the full quantity of silver purchased at the market price in London ; while column 7 shows similar relative value at the London market price, but on the smaller quantity of silver remaining from the purchase after deducting the mint seignorage (column 4); 9 is taken from a table prepared by the Mint Master, Calcutta.

GREAT BRITAIN,—*contd.*

7. The guinea, of 44½ guineas to a pound of gold, was coined in 1666, from which year, until 1717 its current price varied from 20 up to 30 shillings; in 1717 the price was fixed at 21 shillings. The sovereign was coined in 1816 when silver was demonetised.

UNITED STATES.

8. THE UNITED STATES—

	From 1853 to 1873.				By Coinage Act of 1873.		
	Weight in grammes.	Fineness in milliemes.	Nominal value in dollars.	Real value in dollars.	Weight in grammes.	Fineness of standard.	Pure silver contents in grammes.
Gold.							
Double Eagle ...	33·436	900	20	20	not altered		
Eagle	16·718*		10	10			
½ Eagle	8·359		5	5			
¼ Eagle	4·1795		2·5	2·5			
⅒ Eagle or one dollar piece	1·6718		1·0	1·0			
Silver.							
Trade dollar ..	...	...	...	...	27·212	900	24·490
1 Dollar piece ...	26·7295	900	1	1-2¾ cents	...	...	...
½ „ „ ...	12·4441	900	50 cents	48 „	12·5	900	11·250
¼ „ „ ...	6·2221		25 „	24 „	6·25	900	5·625
⅒ „ (dime) ...	2·488		10 „	9½ „	2·5	900	2·25
½⅒ „ (half dime) ...	1·244		5 „	4¾ „			
3 cents piece ...	0·802	750	3 „	3⅛ „			

The eagle weighs by law 258 grains troy, 900 fine, which makes the price of the ounce, fine, 20·67183 dollars.

9. Mr. Soyd states that the silver dollar was the original full legal tender in the United States up to 1853, the gold coinage being also full legal tender. The silver dollar weighing 26·7295 grammes, and the 10 dollars' gold piece weighing 16·718 grammes, both, 900 fine, the proportion of value between gold and silver was as 1 to 16. As the proportion stood in other countries at, say, 1 to 15½, silver in the United States was cheaper, and in consequence it was largely exported. In 1853, therefore, a law was passed reducing the weight of the half dollar and its sub-divisions to the extent required to alter the proportionate value of gold and silver from 1 to 16 to about 1 to 14⅞, or rather 1 to 14·883,—debasing, thus, the half dollar, and smaller coins, below the general rate of 1 to 15½, the same as is done in England and in Portugal. The silver whole dollar remained unaltered, but the mint ceased to coin it; so that, practically, from 1853 to the present time, there has been a single gold standard; and the Coinage Act of 1873, in leaving the gold coin unchanged, formally proclaimed the gold one dollar piece, of 25·8 grains troy, as the unit of value in the United States.

10. The silver coins, below a dollar, were reduced to a subsidiary currency of tokens in 1853, by diminishing the weight of the coin, and not the fineness of the silver in them. Thus while the whole dollar piece (silver) was of the weight of 26·7295 grammes, 900 fine, from 1853 to 1873, the half dollar piece, though still coined at 900. fine, was reduced to 24·882 grammes per dollar's worth, in the proportion of 1 of gold to 14·883 of silver. The Coinage Act of 1873 fixed the weight of the half dollar piece and of the lesser denominations at 25 grammes per dollar's worth, making the mint proportion between gold and silver 1 to 14·9539, and it demonetised the whole dollar by omitting all mention of it.

11. The new trade dollar, established by the Coinage Act of 1873, is exclusively for foreign use, and is professedly issued for the convenience of commerce with China and Japan; with that view, and in order that it may command a premium in foreign markets, it has been made heavier (27·212 metric grammes) than the Japanese international or trade silver dollar, or one yen piece, which weighs 26·957 metric grammes.

12. Mr. Seyd states that the eagle or 10 dollar piece weighing by law 258 grains, ·900 fine, is worth at 77*s.* 10½*d.* per ounce British standard, 493·1613636 pence, or £2-1-1¼*d.* making £1=4·8666; but when Mr. Seyd wrote, half per cent. was charged as seignorage, and the mint tariff was taken at £1=4·84 dollars. "The mint par of exchange is therefore in London 1 dollar = 49,316 pence. But "according to an old United States' coinage, the dollar was formerly valued at "54 pence, so that 40 dollars were worth £9, and 100 dollars = £22·5. But in "the coinage since 1853, 100 dollars = £20·5483, which makes a difference of "9·4981, or 90 per cent. So instead of adopting the new form of exchange, the "old valuation of 100 dollars = £22-10*s.* was retained, and the difference was "quoted by way of premium on the 100. According to this system the actual "mint par is 109½ dollars = £22-10*s.*, or a mint par of £1 = 4·10966 dollars." UNITED STATES—*concld.*

13. In the Session, 1873, the Congress of the United States passed an Act to regulate the value of the English sovereign in American coin, and to fix the "par of exchange." The Act requires that in all payments by, or to the treasury, whether made in the States or abroad, the sovereign or pound sterling shall be computed as equal to 4 dollars 86 *c.* 6½ *m.*, *i. e.*, at the old and existing intrinsic par, without deducting seignorage. This value is to be applied in the appraising of merchandise imported, and for the construction of contracts. The Act further declares that this valuation shall be the par of exchange between Great Britain and the United States, and that all contracts made after 1st January 1874, based on an assumed par of exchange of 54 pence to the dollar, or 4 dollars, 44 cents, and ½ cents to the pound, shall be null and void.

14. FRANCE— FRANCE.

	Francs or nominal value: *Pieces.*		Weight in grammes.	Actual value, francs.	Value of pure contents of each coin.	Pure contents in grammes.
Gold—					£	
900 fine	100	...	32·2580	Same as nominal value.	3·9650	
	50	...	16·1290		1·9825	
	20	...	6·4516		0·7930	
	10	...	3·2258		0·3965	
	5	...	1·6129		0·1982	
Silver—	5	...	25·			22·500
835 fine	2	...	10·	1·85½	...	8·350
	1	...	5·	·92½	...	4·175
	½	...	2·5	·46	...	2·0875

These valuations make £ 1 = francs 25—21·2 centimes in gold, and francs 25—57·2 centimes in silver.

15. All the gold coins and the silver 5 franc piece are legal tender to any amount. This also was the footing of the smaller silver coins until 1867, when, by a convention with Belgium, Switzerland, and Italy, the 2 franc pieces, and those below, were reduced in fineness to ·835, without increasing the weight of the coin, and so were reduced to tokens.

16. The relative value of gold to silver is 15½. Thus:—

1 kilogramme of gold, 900 fine, is coined into 3,100 francs.
1 „ of silver is coined into 40 five franc pieces, or 200 francs.

17. According to a monetary convention concluded in 1865 between France, Belgium, Italy, and Switzerland, the new coinages of the four States are precisely identical in weight, fineness, and legal value, and the coins struck by all or any of these States of the Convention have free circulation within the limits of the union.

1 kilogramme = 1000 grammes.		1 Gramme	=15·432349 grains troy.
= 2·679227 English troy pounds.		1 Troy ounce	= 0·0311035 kilogramme.
=32·1507225 „ „ ounces.		Or	=31·1035 grammes.

FRANCE—*concld.*

18. By the valuation of gold at 1 to 15½ of silver in the French currency, gold became overvalued, after the discoveries of gold in California and Australia, and during the great demand from 1850 to 1866 for Holland and Belguim when they demonetised gold in 1850, and for the exportation of silver to the East. In consequence silver was expelled from the French currency.

19. In his minute, dated 25th December 1859, on a gold currency for India, Mr. Wilson observed: "Since 1850 a sum equal to 130 millions sterling of gold has been coined at the French mint, and a corresponding amount of silver has been exported. For many years prior to 1850 little or no gold had been coined." A later statement, on authority which cannot be immediately traced, put the amount of withdrawals of silver from the currency of France, since 1850, at 150 millions. In the "Commercial History and Review of 1872," published in the *Economist*, dated 15th March 1873, it was stated that "France, in twenty years, took up about 200 millions of gold."

20. With the recent fall in the price of silver the tide has turned. Mr. Hendriks, writing in the *Economist* of 15th November 1873, observed: "Some statistics of coinage in recent years, in France and Belgium, have ap- "peared for the first time, and are of interest sufficient to justify annexing "them to this letter, with some proportionate percentage to show the recently "growing preponderance of fresh silver over gold coinage in France and "Belgium :—

Gold and Silver coined in France.

	Gold.	Silver.	Percentage of total coinage. Gold.	Silver.	Silver coined in Belgium.
	£	£			£
1866	14,589,632	7,579	99·95	·05	...
1867	7,943,180	2,162,062	78·60	21·40	738,629
1868	13,603,067	3,744,822	78·40	21·60	1,314,112
1869	9,367,448	2,330,591	80·07	19·93	2,464,308
1870	2,215,792	2,145,934	50·80	49·20	2,093,615
1871	2,206,795	188,436	91·43	8·57	956,687
1872	*Nil*	15,568	*Nil*	100·	333,000
	49,725,914	10,594,992	82·43	17·57	7,900,351
1873 (8 months)	*Nil*	4,057,600	*Nil*	100·	2,543,000

"These figures show how rapidly silver will, in all probability, supplant "gold in the countries of the monetary convention, if a remedy for the "present evils of a double standard be not soon applied to the state "of things already to be seen in the above statistics. These show that, in "France and Belgium, coinage of silver has, in the present year (1873), been "going on at the rate of about 11 million pounds sterling per annum, the "inevitable result of the retention of the double standard with its fixed mint "price for silver, of about 60 $\frac{15}{16}$ pence per oz. standard, or a proportion of 15½ "to 1 between the two metals, the price of silver in the London market hav- "ing already fallen nearly 3 per cent. below that fixed mint price. The "chances of France and her monetary allies having to face the grave loss and "inconvenience of the supplanting of the convenient gold metallic circula- "tion by an inconvenient silver one, which were brought to her notice by so "many well informed witnesses at the Commission in 1870, are now, by the "course of events, so much intensified, that the matter ought forthwith, once "for all, to be most seriously and resolutely taken in hand, and the law of the "year XI should be abrogated as resting on a dogmatic ratio of 15½ to 1 in "the valuation of gold and silver, whilst about 16 to 1 at no very distant date "is the present order of things. M. de Parieu has placed this view most "forcibly before the bar of public opinion and reprobation, in observing that "even now speculators have an interest in replacing, by silver, the milliards of "gold by the help of which, twenty years ago, they replaced silver, and are, "like woollen manufacturers, continually congratulating themselves on the "prospect of replacing old army uniforms by new ones. Neither of these "proceedings would be more useful to the public fortune than the other, but "that which substitutes a heavy and burdensome metal for a convenient one is, "by far, the more to be regretted of the two.

LATIN MINT CONVENTION.

21. In connexion with the facts in the four preceding paragraphs, the history of the monetary convention, and of the monetary conferences of the States concerned therein, may be narrated. The Latin-nations of France, Belgium, Switzerland and Italy concluded a monetary convention in 1865, with the object of removing the serious want of small silver coin which had been created by the drain of silver to the East. They effected their purpose by demonetising, or reducing to tokens, the silver coins below the five-franc piece. These they coined, thenceforth, of the diminished fineness of ·835, while the five-franc piece continued to be coined at ·900 fine; the convention also arranged that each of the contracting countries should receive in its treasuries the five-franc pieces and the gold coins struck in the mint of any of the other countries of the convention, the coinage being strictly regulated at the relative value of gold to silver of 1 to 15½. At the same time (*i. e.*, in 1865) the representatives of three of the four countries, namely of Belgium, Switzerland and Italy, proposed to France to enter as soon as possible upon measures for the adoption of a gold standard. The proposition was not then entertained.

22. The adoption of a single gold standard was condemned by a Commission at Paris in the beginning of 1867, but was strongly recommended by the majority of a Commission appointed in 1868, which, further, recommended that the five franc piece should be legal tender up to 100 francs. A High Council of Commerce, consisting of Ministers and high functionaries, and of Special Commissioners representing commerce and manufactures, after taking the evidence of witnesses of high financial repute and ability, decided in 1869-70 by a large majority in favor of a single gold standard, but the suspension of specie payments in France, consequent on the war in 1870, thrust the question aside for a time.

23. In 1873, the price of silver having so greatly fallen as to have altered the relative value between gold and silver to 1 to 16⅔, Belgium decided on 2nd November to adopt a single gold standard; Switzerland, too, in November 1873 asked France to call together a fresh conference of the four Governments which had entered into the monetary convention of 1865, "with "a view to consider the question of suppressing the double gold and silver "standard, and the adoption of a single gold standard." M. Magne, the French Minister of Finance, "admitted that the danger of an influx of depre- "ciated coin was very real. It would be in vain for Belgium to suspend "the coinage of silver, and for France to limit it, if Italy and Switzerland "continued to maintain it. Each country could not protect itself so long as "the others had the legal right of sending to it all their silver five-franc pieces."

24. It was accordingly arranged that a monetary conference should be held at Paris in January 1874. On the 24th of that month, the *Economist* reported "that the French Government has definitively arranged that M. Dumas of the "Paris Mint, shall preside. It is also settled that M. de Parieu shall act as Vice- "President. The appointment of the latter effectually disposes of some miscon- "ception of the views of the French Government caused by the recent incident "in the National Assembly, where M. Magne, the Minister of Finance, in order "to prove to the defenders of the double standard that their views should be "represented, nominated, with a certain chivalry of manner, the Baron "de Soubeyran, one of their mouthpieces in the Assembly, to act as a Com- "missioner. But, in point of fact, the Law of Germinal, year XI, the palla- "dium of the double standard, is already virtually abrogated by the suspension "of that law. This suspension of the right of unlimited coinage of silver, "and the restriction of the powers given by the law thus suspended to an "almost nominal amount of coinage of that metal, is, in itself, an abstract "adhesion to the theory of a single gold standard on the part of the French "Government, and their appointment of M. de Parieu, as one of the Commis- "sioners to represent them, is a fresh sign of their being in favor of the gradual "abolition of a law which, after seventy years' experience, is found to be effete "in theory and prejudicial in action."

25. With Italy, which had proposed a single gold standard in 1865, circumstances had altered embarrassingly since the conference of that year.

LATIN MINT CONVENTION —*contd.*

Mr. Hendriks wrote in the *Economist* on 20th March 1875: "Italy has "been calling in the diverse gold and silver currencies of the several "States which now form that Kingdom and replacing them by a uniform "coinage of the convention of 1865. In 1873 and 1874 there was with- "drawn of gold coin £1,124,432 and of silver and mixed metal £18,926,306, "and there was coined in 1874, £236,777 in gold and £2,400,000 in "silver." Hence there was a large amount of silver with the Italian Government; there was also in the National Bank of Italy on 31st December 1873, 60 millions francs' worth of silver bullion. Italy being thus encumbered, her representative in the monetary conference which assembled in January 1874 could not agree to a single gold standard, and France also favoring a postponement, the question was put aside. But the conference agreed to a new convention by which each of the four countries was free to coin any amount, whatever, of gold coins, but was to be restricted in the coining of silver five-franc pieces to amounts fixed by the convention. The Paris correspondent of the *Economist*, noticing the discussions of the conference in January, stated: "The question of the gold standard, although "deferred, was touched on in the earlier sittings of the conference. Switzerland "wished to make the change at once; the Belgian delegates favored an eventual "adoption of the gold standard; while Italy was averse to closing her doors "to either metal, and with her paper currency depreciated to the amount of "15 per cent. is glad to obtain either gold or silver." The French delegates were divided in opinion—the French advocates of the double standard and the single gold standard having both been represented in the convention.

26. The conference of January 1874 "was also divided into two camps on "the cause and probable duration of the depreciation of silver. On the one hand, "it was said to be only due to temporary causes, such as the perturbation caused "by the payment of the war indemnity, and the demonetisation of a milliard "of silver coin in Germany. On the other side it was shown to be progressive "and permanent, as proved by the successive adoption of a gold standard in "Germany, Sweden, and Japan. Next came the practical question of the "remedy to be applied to inconveniences as to the existence of which all were "in accord. The idea of fixing a limit to payments in silver was rejected, as "prejudging a future question; an entire suspension of the silver coinage was "thought too radical a measure; while to limit the circulation of silver in the "interior of each country would have condemned Italy to a monetary isolation, "as her metallic circulation at this moment is exclusively of silver. The only "issue left open was to limit the coinage, and this was agreed to unanimously."

27. The correspondent of the *Economist*, criticising this limitation of the coining of five-franc pieces, observed: "This measure is in reality a first step "towards a gold standard; for, from the moment that a limit is put to the "production of silver coin, it becomes reduced to the rank of a monetary "token, while gold, being received or coined without restriction, will be the "medium of all business transactions." The convention met again in January 1875, but only to repeat the proceedings of the previous year, *viz.*, to postpone the question of a single gold standard, and at the same time to affirm its principle, by limiting anew the coinage of five-franc pieces in 1875. The limits fixed for 1874 and 1875 were—

	France. Francs.	Belgium. Francs.	Italy. Francs.	Switzerland. Francs.	Total. Francs.
	Millions.	Millions.	Millions.	Millions.	Millions.
1874 ...	60	12	*40	8	120
1875 ...	75	12	60	8	155

The extra coinage in 1875 was conceded on an urgent representation from Italy which had a large amount of old currency to recoin.

28. France, with a silver currency which is variously estimated at 1,000, 1,200, and 1,500 millions francs, of which only 240 to 600 millions would be required as token coinage, with a gold standard, considered herself in the same predicament as Italy, and hence the question, that is, the adoption, of a single gold standard was deferred. Italy, however, may come to perceive, and so may

* Besides 20 millions to be coined for the National Bank, which however was not to be put into circulation.

France, that, as in Germany, the profit from demonetising, by debasing, the silver currency will cover the expense of recoinage, and also any loss in selling surplus silver (para. 45). Furthermore, the *Economist* of 15th November 1873 quoted the following from the *Economista* of Italy: "Mr. Minghetti has under consideration a means of diminishing the loss to which the treasury is subject by the obligation to pay the coupons of Rente, abroad, in gold. This end would be attained by compelling holders of the Italian funds abroad to convert their titles to 'bearer' into registered stock, for which a book of the debt would be created in the principal capitals of Europe. This measure would put an end to the speculation now practised in Italy of sending the titles abroad for payment in gold. If this plan is adopted, the coupons of the titles to 'bearer' would only be paid at the rate of exchange on Italy. The loss to the Italian treasury by the payments in gold abroad amounts to 20 millions of lire (£800,000) annually—a part of which would thus be economised." The saving would soon be absorbed in the increasing annual charge for the payment, abroad, in gold, of interest on the new loans, for annually recurring deficits, which must continue to be raised abroad if the lowest possible rate of interest is desired. France would incur a similar loss for the payment abroad of interest on her much larger debt, if, by continuing a double standard when she resumes specie payments, she courts the inevitable expulsion of gold, and the conversion of her metallic currency into a silver currency. LATIN MINT CONVENTION —*concld.*

29. In December 1873, shortly before the monetary conference in January 1874, a discussion took place, at a meeting, in Paris, of the Society of Political Economy, between the supporters of the single and the double standard; the preponderence of opinion was in favor of a single standard of gold. In the same month, M. Bonnet discussed the subject in the *Revues des deux Mondes*. Among other remarks, he observed: "In the monetary enquiry of 1870, one of the great objections put forward was the difficulty of getting rid of the 1,000 or 1,200 million francs in silver circulating in the country, although only one-half required to be withdrawn, as 500 or 600 millions would still have remained in the hands of the public, in the form of small change. The Germans have more than 2,000 millions in circulation, and that has not prevented them from decreeing their reform. Shall France wait until it has been accomplished, before doing the same? In that case, it will not be 1,500 or 2,000 millions that she will have to demonetise, but perhaps 4,000 or 5,000 millions, with a depreciation still greater than at present. France hesitated in 1869 and 1870, when there were only 1,200 millions of silver 5-franc pieces, and there was no depreciation, and she will make up her mind when there are 3,000 or 4,000 millions, and the depreciation shall have become serious. Hence the coining of franc 5 pieces should at once cease." FRANCE.

30. On 1st July 1875 the coin and bullion, principally gold, in the Bank of France and its branches exceeded 62 millions sterling;—and the absence of premium on gold indicates the facility for resumption of cash payments in that metal, whenever the finances of the State may admit of it. The adoption of a silver standard seems quite improbable, while that of a single gold standard seems certain.

31. BELGIUM AND HOLLAND.—In Belgium the metallic currency is the same as in France, and the former has determined to demonetise silver. In "Holland" (wrote Mr. Seyd) "the silver valuation rules,—the florin and half-florin being full legal tender, whilst the gold coinage is considered "*commercial coin*, varying in price in the market according to supply and demand. * * The mint buys silver at its own discretion." BELGIUM AND HOLLAND.

In his Minute on a gold currency for India Mr. Wilson observed: "Before the gold discoveries silver was rarely so low as 4*s.* 11*d.* the ounce; since, it has seldom reached or at least exceeded 5*s.* 2*d.* the ounce. But under the apprehension of a fall, the Government of Holland, proverbial for its caution, was the first to take alarm, and having then a circulation of both gold coins and silver coins, which were a legal tender, at a fixed relation to each other, they demonetised the gold coin, leaving silver, the ancient standard, the only legal tender." On 16th November 1872 the

HOLLAND. *Economist* stated: "Holland is about to fall in with the general custom of "the world by adopting a gold standard. The Bank of Holland declines "any longer to buy silver at the fixed tariff of 104·65 the Dutch pound." The Commissioners appointed in Holland to consider the subject of a silver or a gold or a double standard, reported in January 1873 that events had strangely falsified the expectations of a fall in the price of gold, which had induced the Dutch Government to demonetise gold in 1853: "It is silver and not gold "that has slightly fallen in value. The chief cause of this unexpected result "has been the fact that *gold* is now being adopted as the standard of value "in Germany and the Scandinavian Kingdoms, whereby a new demand for "gold has been produced, while the demand for silver has been proportionately "lessened; and the upshot is, that, despite the immense increase in the supply "of gold, this metal has fully maintained its value as compared with silver. "Moreover, as the adjoining countries are adopting a *single gold standard*, the "Dutch Government perceives that it will be singularly inconvenient for the "people if the opposite standard of silver is any longer adhered to in Holland." The *Economist*, continuing its summary of the report, added: "At first it was "the general expectation, alike in Holland and in this country, that the Dutch "Government would adopt, like their neighbors, a *single gold* standard. The "Monetary Commission, however, do not take this view of the matter; they re-"port that the adoption of "a single standard in Holland would be 'inopportune,' "and they recommend the adoption of a *double standard* whereby both "gold and silver will be legal tender. In coming to this conclusion, in fact, the "Dutch Government have acted upon the view that as long as the currency of a "country consists of gold and silver in *tolerably equal quantities*, it is practi-"cally impossible, and would be grossly unjust, for the Government to proclaim "a single standard, making one of the metals legal tender and simultaneously "demonetising the other." In such a country the coin deposited in banks will be gold and silver in nearly *equal* quantities, and it would be unjust for the Government to decree that the banks shall return this money only in one of the metals; for if this metal were to be depreciated (say silver), then the banks would gain at the expense of the public; while, if the metal thus made sole legal tender were of higher relative value than the other, then by an equal act of injustice the banks would lose and their depositors would gain. In course of time, Holland will follow the example of her "neighbours and adopt a single "gold standard; but to do so at present would be inopportune, and the right "thing for Holland, with its large amount of silver money, is the adoption of "the double standard." Lastly, the Commissioners were of opinion that their country would encounter serious difficulties by retaining its present monetary system, and they urged the necessity of prompt action on the question, and that the further coinage of silver should be stopped.

32. The *London Economist* of 1st May 1875 contained the following paragraph: "*The gold standard in Holland.*—According to correspondence "from the Hague, the Dutch Government, after some hesitation, appears about "to take a decided step towards a gold standard, which will necessitate, mean-"while, a peculiar period of transition. The Minister of Finance, it is stated, "has introduced a Bill which seems to be likely to pass, proposing to retain for "the present the silver now in circulation amounting to 14,750,000*l.*, and to in-"troduce, side by side, a legal tender currency of 10 and 5-florin pieces in gold "—the State alone to have the power of coining new silver. The effect of this "will apparently be to introduce a double standard, as in Germany,—the silver "not being withdrawn, but its amount being limited, so as to let the gold become "the variable and international money. The gold, it is stated, is to bear a pro-"portion to silver of 1 to 15·625, which undervalues gold as compared with the "present market price of 57 pence per ounce of silver. It seems doubtful "whether a Bill of this kind will cause, in the present state of business, any "active demand for gold from Holland; but if trade were to become more active, "generally, the 'fall' of the gold standard both there and in Germany would no "doubt be felt." The example of Holland is of special interest for India, a gold standard being adopted notwithstanding the annual remittance, by Netherlands India, of a large tribute which those possessions collect in silver.

33. The considerations which have prevailed with Holland have also influenced Belgium, in which kingdom gold to the amount of £2,437,000 was coined

in 1874, of which nearly one-half was Russian gold. On 29th March 1873, or in the previous year, an "able correspondent" in the *Economist* had observed: "As there is reason to believe that not only Germany but Holland, and other countries, have been for some time collecting gold in preparation for the revolution in the monetary standards, long foreseen, the process will not involve any formidable difficulty. BELGIUM.

34. SCANDINAVIA.—In a Report on Scandinavian Currency Reform by Mr. Strachey, Her Majesty's Secretary of Legation in Denmark, dated February 1873, the following observations occur: "Owing to the adoption of this (new) monetary system by Germany, the three Northern Kingdoms are, with Holland and Finland, the only European countries where the exclusive silver standard remains. Scandinavian trade has already suffered inconvenience from the want of a local gold measure of value, failing which, fluctuations in the London silver prices, amounting sometimes to 2 per cent. within the period for 'long bills,' are felt in the foreign exchanges. The thaler and gulden circulation of Germany is estimated at 500 millions thalers, say 80 millions sterling, which amount will have to be issued in gold. The silver displaced will be thrown on the European market;—countervailing circumstances may arise, such, for instance, as the contraction of the metallic circulation in other countries;—but, on the whole, the effect of the new German monetary legislation will doubtless be to confirm and aggravate the present tendency to a gradual decline of silver prices. SCANDINAVIA.

35. "The fluctuations in those prices will presumably be more severe than heretofore. Silver being no longer a principal money of account in any country with a large circulation, the European demand for the metal will follow the wants of the Asiatic trade, of the industrial arts, and of official requirements for subsidiary coinage. The German mints used to coin silver on demand for private persons; but the new law prohibits such coinage, so that the usual remittances of silver to Germany, on account of trade balances, will no longer occur. This occasional absorption of the metal from foreign markets, for this purpose, had the effect of steadying silver prices. Further, should the anticipated fall of silver happen, the members of the Latin Mint Convention, France included, must proceed to adopt the exclusive gold standard, otherwise the silver money, being overvalued, will drive the gold out of circulation to the melting pot. From the countries in question (and their example must be followed by Holland and Finland) fresh floods of silver will be poured, while gold, already in such request for Germany, will again be largely demanded. The adoption of a gold standard will, under such conditions, be a much more costly operation than it need be, if performed in time. The change should evidently be made before silver has a fresh fall, and gold a fresh rise.

36. "This assumed, the relation of the silver dollars of Scandinavia to the gold money of other countries will be so unstable that the comparison of prices will be complicated, and foreign trade will be embarrassed by the presence of an element of risk, which will raise the price of imports and lower the value of exports. Besides disturbances relating to foreign business, the contemplated derangement of silver prices would, it has been urged, cause domestic perturbation. On these some stress has been laid; but as their nature (real or supposed) was exhaustively treated by M. Chevalier Tegoborski, and other economists, in their well-known speculations on the calamitous results to be apprehended after the fall which they foresaw in the value of gold, I think it unnecessary to reproduce the Scandinavian arguments on this subject. * *

37. "Such in the main were the reasons urged, and generally admitted, in favor of the adoption of a gold standard. By their side prevailed the conviction that an eventual reform should be common to the three Kingdoms, so as to include the establishment of a single monetary system. * * *

38. "Considering the largeness of the Scandinavian commercial transactions with England, which for Denmark amount to two-thirds of the whole foreign business, and the importance of sterling value in the account with Asiatic countries, as well as for European remittances, it might have been

SCANDINAVIA —*concld.*

expected that a coinage of sovereigns, or at any rate of an equivalent northern unit would have had advocates. This was not the case. I am not aware that any voice has been raised in favor of monetary assimilation with England. On the other hand, the objections to such a course have been strongly stated, and have generally been admitted to be invincible. Our money, it has been urged, has highly inconvenient sub-divisions, and our standard of 11-12ths fine is an eccentric departure from the practice of European mints, with nothing to recommend it. Still more serious fault is found with our rule of declining to maintain our gold at its full weight. 'Gold pieces worn by circulation,' says Professor Broch of Christiania, a distinguished Norwegian economist, when offered at the Bank of England, are cut in two, and in this state, which prevents their further use as currency, return to the owner. The consequence is that no one brings in gold coins whose weight is below the limit of tolerance, and the more such coins fail of the legal weight, the more surely, and the longer, they continue to circulate. This objection to our system has been frequently stated;—it is asserted in the Report of the International Commission, and it is figured, as will be seen hereafter, at the moment of the ratification of the International treaty.

39. "The sovereign and gold franc thus excluded, there remained for consideration the new German" Reichsmünze. Germany, of course, is not the chief customer of these kingdoms. England is far before her in this regard, especially with respect to Denmark. But the trade balances due to England would naturally be discharged by bills of exchange, or, when these do not suffice, in bars; so that the identity of money (*i. e.*, of the gold coinage of the two countries) is here of secondary importance. Whereas Jutland does a large retail export business in cattle and food stuffs, and the influx of German "travellers into the three kingdoms, and of the inhabitants of these into Germany, is so considerable as to furnish an additional reason in favor of the same unit of account passing at Stockholm, Copenhagen, and Berlin."

40. Eventually, however, "the examination of the different schemes which I have described led to the opinion that these Kingdoms would do well to drop the search for an imaginary universal system, and proceed to coin specific Scandinavian moneys nearly related to the present dollars, so that the population should be saved, if possible, the trouble of performing a sum in arithmetic whenever the old values have to be expressed in the new. * *

41. "The recommendations of the Committee were embodied, nearly as they stood, in a treaty which was signed in the winter at Stockholm. And a Bill to enable the Danish Government to carry them out was drafted by the Danish Currency Committee, and presented to the Legislature. But one objection was raised here to an Article of the Treaty, which provided that gold moneys, whose loss by wear and tear exceeded 2 per cent. of their normal weight, might be refused at the public treasuries, private persons being allowed to refuse them as legal tender when the loss should be over ½ per cent. Light money was not to be re-issued from banks or treasuries.

42. "Those provisions, which were imitated from our own official practice in respect to light sovereigns, provoked some disapprobation here. It was declared that, thanks to our procedure, there was a larger number of light gold coins in circulation in England than in any other country, and that this notorious fact was one of the main reasons which prevented Germany from adopting our monetary system. Recognising the force of this objection, the Danish Government obtained the addition to the Treaty of a supplementary Article, under which each Kingdom reserves to itself the right of extending its own liability in respect to the acceptance of gold at the public treasuries. According to the Danish coinage law, gold moneys which have lost ½ per cent. of their weight will cease to be legal tender between private persons, but will be taken in official payments at their full nominal value and not re-issued. A similar rule is to hold for the subsidiary money; the Bank of Denmark, and the chief financial department, central and provincial, will be bound by it; and the Government is empowered to endeavour to arrange with private institutions for an observance, on their part, of this most important restriction.

43. GERMANY.—Writing two years after the victory of Sadowa, Mr. Seyd observed: "Previously to the recent energetic and practical movement "for unity, Germany, divided into a number of small States, under the almost "absolute sway of a variety of Governments, was, *par excellence*, the land of "the most bewildering confusion of coinages. Even the native German, to "the manner born, is hardly able to thoroughly master and command the "coinage Babel of his country." The four principal monetary systems, Mr. Seyd remarks, were the— GERMANY.

North German valuation, with Berlin for its chief city, and with the silver thaler as the money of legal tender.

South German valuation, with Frankfort-on-the-Maine for its representative town, and with the silver florin (gulden) as the coin of legal tender.

The valuation of the Hanse Towns, or the free cities of Hamburg and Lubeck, with the mark banco as the money of account.

The Louis d'Or thaler, or the money of account of the free city of Bremen.

44. In 1857 a convention of the several German States met at Vienna, at which it was agreed to adopt as the standard weight for bullion, the new müntzpfund (mint pound), which is exactly one-half of a French kilogramme, and is divided into 500 grammes (or 16·0753625 oz. troy). From this mint pound of fine silver, it was agreed to coin—

30 Thalers, or North German valuation,
45 Austrian gulden, or Austrian valuation,
52½ South German gulden, or South German valuation,

which made 2 thalers equal to $\left\{\begin{matrix}3 & \text{Austrian} \\ 3\frac{1}{2} & \text{South German}\end{matrix}\right\}$ gulden.

45. In North Germany, the silver thaler (30 groschen) or coin of legal tender weighed 18·5185 grammes, 900 fine, and the next smaller coin, or $\frac{1}{6}$ thaler (5 groschen), weighed 5·3419 grammes, 520 fine;—these contained the full proportion of fine silver; but the lower denominations of $\frac{1}{12}$ thaler, 375 fine, and $\frac{1}{30}$ and $\frac{1}{60}$ thalers, 220 fine, were tokens.

Mr. Wilson observed in his minute on a gold currency for India: "In "all the German States in which formerly gold coins circulated at fixed rates, "they have been demonetised; and under a convention of 1857 silver has been "reverted to as the sole standard. * * But as some States were anxious to retain "a right of coining gold, after the greatest consideration no better plan could "be devised than the imperfect one of declaring silver the sole legal tender, and "enacting that each State is to be at liberty to allow gold coins to be taken "at their treasuries, in lieu of silver, at a rate of exchange to be beforehand "decided upon. Such pre-decided rate of exchange shall last, at the utmost, "six months, and at the close of the last month it is to be each time reconsidered "for the next similar period." Mr. Wilson continued: "As far as I can learn, "and as might have been expected, a system of gold currency so imperfect, "and exposed to such uncertainty, has practically remained a dead letter."

Mr. Seyd corroborated this in 1868, remarking that "upon the whole silver remains as yet the great staple of the German coinage."

46. Shortly after the submission of their report by the High Council of Commerce, in Paris (para. 22), Prussia convened, in June 1870, a monetary conference of the German States for considering the expediency of changing, even gradually, to a single gold standard. The primary object of the new coinage in Germany is to replace the diverse coins of the several States of the German Empire by a uniform currency. Without a change of standard, the expense of withdrawing the old coinage and issuing new would have been enormous; but, incidentally, the question of a gold standard, which, as above stated, was about to be considered in 1870, when war broke out, compelled attention by the fall in the price of silver, the expanding trade of Germany with countries which use gold, and the means supplied by the French indemnity for introducing a gold currency in accordance with European opinion as intelligently expressed in the monetary conferences of 1867 and 1870;—these considerations determined the change from a silver to a gold

GERMANY—*contd.* standard, and thereby provided funds for the new coinage. By the change of standard, the existing silver currency of full weight has to be recalled for debasement and for re-issue of a portion as tokens, and it is estimated that the profit from the debasement will cover the expense of the new coinage, including any loss from the sale of the remaining silver which may be withdrawn from the currency.

47. By the coinage Acts of November 1871 and May 1873, gold is established for the coin of legal tender, with silver for a subsidiary currency, which is not to be a legal tender for more than 50 marks, or nearly 50 shillings. The gold coinage is to be nine-tenths fine, or in the proportion of 900 parts fine gold to 100 parts copper alloy. A German pound, or half a kilogramme, of fine gold is to be coined into—

69⅔	twenty mark pieces	=19*s.* 7*d.* each, or exactly £4·895; or,
139⅓	ten mark pieces	= 9*s.* 9½*d.* each—this piece to be the unit of account; or
279	five mark pieces	= 4*s.* 10⅔ pence;

the several coins corresponding nearly to the English sovereign, half-sovereign, and crown piece. A German pound of fine silver is to be coined into—

20	five mark pieces	=4*s.* 10⅔*d.* each; or
33⅓	three mark pieces or thalers	=2*s.* 11½*d.* each, and corresponding to the former thaler;
100	one mark pieces	=11⅔ pence each, and divided into 100 pfennings each;
1,035	ten penny pieces (tokens).	

The approximate par in account for the thaler or 3 mark piece is three shillings, and for the mark one shilling.

A German pound, or half a kilogramme, is equal to ... } 1·33961363lbs. troy, or 1·1023105 lbs. avoirdupois.

48. According to the preceding statement,—

GOLD—

1lb. of fine gold is equal to 139½ ten mark pieces, or to 1,395 silver marks.

SILVER—

Old coinage—1lb of fine silver equal to 30 thalers,
New coinage—1 „ „ „ to 100 marks,
1 thaler = 3 marks or $\frac{3}{100}$ of 1lb,
30 thalers = 90 „ or $\frac{90}{100}$ of 1lb,

thus giving a seignorage of ten per cent. compared with 30 thalers of the old coinage. As a temporary measure, the old silver coins remain current at a fixed valuation relatively to the new gold coin.

One pound of fine gold being coined into 139½ crowns or 10-mark pieces, equal to 1,395 marks, the Bank of the German Empire is obliged by the new Currency Law to exchange its notes for ingots at the price of 1,392 marks for one pound of gold, the ingots being assayed at the expense of the parties offering them. The Empire is bound to keep up the full weight of the gold in circulation, that is, to accept and coin anew every 20 and 10-mark piece which has left the mint, and has become so worn with use as no longer to pass current.

AUSTRIA. 49. AUSTRIA.—The coinage of Austria, in which silver is the sole legal tender, has been noticed in the preceding remarks on Germany (para. 43). The mint par of the Austrian silver gulden or florin, struck in conformity with the German Mint Convention of 1867 is £ 1 = florins 10·215;—but, after 1866, Austria, having left the Germanic Confederation, declared that she ceased to be bound by the convention. Mr. Soyd added: "It remains to be seen whether "she will continue to adhere to the present system."

50. Recently, this question has been raised in the more general form of whether Austria should resume specie payments in silver or in gold? In December 1873 M. Wolowski stated that "the Minister of Finance at Vienna had "recently told him that it could not be supposed that the Austrian Govern- "ment would commit the immense mistake of resuming payments in specie "and abolishing silver coin. The treasury, and the Austrian Bank, besides, "possessed scarcely any but silver." But eighteen months later, one-half of the bullion in the Bank of Vienna consisted of gold.

51. On 5th March 1875, a "Congress of Austrian Economists" was opened at Vienna, "its members including prominent men of all classes, from high "functionaries to great names in industry and commerce, and even the high "aristocracy." Among other subjects, the resumption of cash payments was discussed at the first meeting, on the basis of a detailed voluminous report, founded on statistical enquiries, which had been prepared on the several points for discussion. The points were four, and they consisted of the objections to a resumption of specie payments, urged by the protectionist party, or manufacturers, and all engaged in the foreign export trade. The objections, and the replies in the report submitted to the Congress, were as follows:— AUSTRIA—*contd.*

I.—*The protectionists imagine that the loss at present incurred on the change of bank notes, and legal tender notes against metal, brings with it a protective advantage to Austrian manufacturers.*—The report explains, by examples of similar cases in past times, and by the movement in the price of goods and of silver, how the under valuation of notes brings an advantage with it only for the moment at which it takes place, and for the time while it still increases. The moment that notes sink in value wholesale prices rise, whilst retail prices and wages fall much slower—the difference effected hereby falls to the advantage of the manufactories. For the same reason manufacturers will encounter losses if the value of notes rises, or if it reach a par with bullion. The money they have received from goods sold out of the country will not buy as many Austrian Bank notes as it does now, nor will the wages of their hands sink so soon to their proper level. The reporter, however, proves that by the re-establishment of cash payments, they would suffer these losses but once, whilst as long as the present state of under-valuation lasts, the price of metal is exposed to frequent fluctuation by which the manufacturers suffer much more. Besides, wholesale prices are always somewhat regulated by the international market, whilst retail prices, from a fear of the fluctuation in the value of metal, rise higher than the rate of the latter, that they may form a sort of an assuring premium. Therefore, prices and wages are higher in the country than the rate of metal, and inland production stands at a disadvantage to foreign.

II.—*By a reduction of notes the rate of discount would be raised.*—This opinion is refuted by the fact that the paper circulation is not the capital itself, and that the rate of discount depends upon what capital there is in readiness, and not on the amount of the note circulation.

III.—*The redemption of notes, whilst metal is at a premium, would be expensive.*—The report shows in reply, how the Austrian Government has at present more extra expenses to defray than the interest of a loan would amount to with which it could withdraw its 347 millions of gulden worth of legal tender notes. These extra expenses are due to the silver necessary for the payment of the Austrian 'Silberrents,' for acquisitions out of the country, and for the high price charged for everything necessary for the army. I have heard this calculation confirmed by the Ministry of Finance, which caused a similar computation to be made, and came to a similar conclusion.

IV.—*In case of a war the Government would again have to issue enormous quantities of legal tender notes, and to suspend cash payments.* This objection, the reporter says, refutes itself, because if it really is to be feared that, in case of a war, the Government will suspend cash payments, and issue large quantities of notes, then there is all the more cause for having cash payments in time of peace, that the measure in question may be the more effective in a case when it might become necessary.

51*a*. Continuing his report of the proceedings of the Congress, the Vienna correspondent of the *Economist*, in a subsequent letter dated 13th April 1875,

AUSTRIA—*contd.*

wrote: "The Congress of Austrian Economists, held in Vienna last week, gave good results withal, so that we may calculate that it will become a lasting institution, and a safeguard of the public interests of both producers and consumers. * * On the second day, the possibility of a return to cash payments, and the prospects of note issue, were discussed. In this question, the motion of the reporter, Dr. Hertzka, whose opinion I explained in No. 1649 (para. 50, above) was almost unanimously voted, and by this vote the ardent wish was pronounced that the Austrian Government would, as soon as possible, withdraw its State notes. The Committee was entrusted with bringing the question forward at a future Congress, whether, in case of a return to cash payments, the silver or the gold standard should be preferred. At present the silver standard legally exists in Austria, with, however, a certain concession to the States contained in the Latin Mint Treaty. Gold coins of the value of 8 gulden are to contain as much fine gold as 20-franc pieces, and circulate just the same as Napoleons in the above-mentioned States. The Austrian National Bank at present possesses, in ready money, 145 millions of gulden, of which, about 55 millions are in gold, and 90 millions in silver. The Bank has therefore, in case of a return to cash payments, no greater disadvantage to bear, whether the one or the other standard be adopted. As Austria's relations with Germany are very important, and as it cannot be said whether the Latin Mint Treaty will not, some day or another, change to a pure gold standard, it is to be advised that Austria and Hungary, in returning to cash payments, should decide in favor of a gold standard. The greater expenses incumbent on the introduction of a gold standard will be amply repaid by avoiding the continual losses which the rate of exchange of silver against gold brings with it.

52. On 29th June 1875 the same correspondent wrote: "Competent "persons are of opinion that with the growing production of silver in America, "and the enormous sale of silver caused by the German Government, the price "of this metal will sink still lower. The relation between silver and gold, deter-"mined by the Mint Convention of Latin countries at 15½ to 1, has already "changed to 16½ to 1; so that it is to be presumed that France and its allies "will comprehend the necessity of adopting a pure gold standard. Austria "has also a reason for considering this question a highly interesting one, as it "is of importance to know which standard will be adopted when payments in "ready money, demanded on all sides, will be taken up again. The question is "whether Austria should retain its present double standard, or change to a "gold standard or silver standard. There are so very few gold pieces coined in "Austria that, without touching the law, the silver standard alone is "what will be probably adopted. The low silver price has reduced the pre-"mium on silver against bank notes to 1¼. The return to payments in ready "money would, at the present moment, cause, at once, but small expense. On "the other side, continual expenses would be incurred by Austria for the "gold premium,—payments affecting foreign commerce being for the greater "part demanded in gold. Although the change to a pure gold standard "would require the withdrawal of more paper money, and would therefore "cause greater expense at once than the silver standard, yet the introduction of "the former would be of greater advantage to the country. The measure "would be much facilitated by the Austrian National Bank having one-half "of its cash in gold coins, among which there are 71½ millions gulden worth "of Napoleons."

53. It appears from this extract,—1*stly*, that if specie payments be resumed in silver, not much additional silver will be required, the premium on silver against bank-notes being only 1¼ per cent.; 2*ndly*, if specie payments be resumed in gold, one-half of the coin and bullion balance in the National Bank has already been accumulated, towards that end, in gold; 3*rdly*, that Austria has a large adverse balance in her foreign trade which she must settle in gold, that is, at a heavy loss in exchange on her imports owing to the low price of silver; 4*thly*, it may be added from another source that "from 1779 until the "present time (1874) there was not a year

	Imports. Gulden.	Exports. Gulden.
	Millions.	Millions.
1870	431·9	395·4
1871	540·7	467·6
1872	613·7	388·0
1873	583·1	423·0
1874	565·6	454·2

"in which the revenue of the State came up to the expenditure," and that for the projects of railway extension on which Austria has embarked there must be fresh borrowings from countries which have a gold currency and which on lending the money will exact a premium on gold, or loss by exchange on the diminished and still decreasing price of silver. On the considerations 2, 3 and 4 it is doubtful whether Austria may not yet adopt a single gold standard. AUSTRIA—*concld.*

54. JAPAN.—"In 1853, Japan, after 200 years of silence and isolation, was "roused from her fancied security by the mission of Commodore Perry, flag "officer of the United States squadron in China, who was charged by the Gov- "ernment to effect a treaty. * * In 1858 a more comprehensive arrange- "ment was effected. It does not appear, however, that even then the question "of foreign and Japanese exchanges was well understood, for, in the treaties "then concluded, it was 'provided that foreign coin should be current in Japan, "'and pass for its corresponding weight in Japanese coin of the same descrip- "'tion, and as some time will elapse before the Japanese will become acquainted "'with the value of foreign coin, the Japanese Government will, for the "'period of one year after the opening of each port, furnish British subjects "'with Japanese coin in exchange for them, equal weight being given, and no "'discount taken for re-coinage.' JAPAN.

55. "During the '200 years of silence' silver was greatly over-valued "in the Japanese currency relatively, both to the copper cash, and to the gold "koban. A silver 'bu' exchanged for 1,600 copper cash current in China; "and a gold koban exchanged for 6,400 cash, and when Yokohama was first "opened, the gold koban could be bought in the market for four silver "bus." "The foreign merchants soon discovered that they could obtain at the custom- "house, where the Government had established an exchange bank, 3·11 bus "for one dollar, which was worth in China from 800 to 1,000 cash, while the "3·11 bus would realise 4,976 copper cash, thus showing the handsome profit "of above 380 per cent. The consequence was a large import of dollars into, "and a large export of copper cash from, Japan."

56. Similarly, with the gold koban "the treaty having provided for equal "weights, the foreign merchants could obtain at the Government Bank 311 "bus for 100 dollars, that is 4,976 tempos, equal to 49,760 cash. As the con- "ventional value of a koban was 6,400 cash, by working the exchange it could "be got for about 1 dollar 25 cents, whereas its intrinsic value was about 3 "dollars 25 cents; or, in other words, a dollar worth in sterling 4*s.* 3*d.* was "placed in Japanese circulation at 12*s.* 7½*d.*

"A discovery of this kind resulted in a rush upon the Government Ex- "change Bank, and the market was glutted with dollars from China: in one "day, three American vessels landed 1,200,000 dollars, and still the influx "continued. The Japanese were entirely bewildered, and at last closed "the Exchange Bank, saying that they had no money left; but after "some negotiation with the foreign authorities, an arrangement was "made whereby they undertook that demands for exchange should be "met in equitable proportion as far as their means allowed. Upon this be- "coming known, demands for fabulous amounts were lodged at once, and all "again fell into a state of confusion. * * Finally, the Government closed the "Exchange Bank, together with its financial operations, and left monetary "matters to adjust themselves."

57. Mr. Robertson, Vice-Consul at Yokohama, from whom the preceding account is taken, thus concludes his narrative: "It must doubtless have be- "come evident to the Government that this disaster arose entirely from their "placing a fictitious value on the silver coins used as currency, converting "them in fact into tokens representing a value in excess of their intrinsic one; "indeed, their financial scheme appears to have been to make copper or iron "cash the standard measure, and upon that to construct a curious fiction "as regards coined bullion. This was all very well as long as the country "remained closed; but the moment it was opened to foreign influence, its utter "rottenness was made apparent; and the main object the Government had in "view, namely, that of preventing the export of bullion, was defeated by the "very measures they took to check it."

JAPAN—*concld.*

58. If for the silver "bu" we read the Indian rupee, for the gold koban and the copper cash read Indian exports, and for the Mexican dollar read the silver abroad which is annually depreciating, the historical parallel would be complete a few years hence were foreign trade with India to be stopped for only the intervening time: but as the price of silver will decrease gradually, the significance of the intermittent spurts of increased exports may not be perceived on account of the trade receding, as local prices slowly rise, in the interval between two sensible gradations of fall in the price of silver.

59. Japan effectually removed the difficulties just described by reducing the weight of the gold coins, and fixing the relative value of gold to silver as 1 to 15½, while she retained a double standard, until 1872, when she changed to a single gold standard, reducing silver to a subsidiary currency as legal tender for not more than about forty shillings.

60. The modern history of the precious metals as currency may now be given. Originally, silver was the standard; then, as commerce expanded, and the production of gold increased, while that of silver declined, between 1800 and 1848, gold was adopted in addition; and, more recently, on the resumption of cash payments in England, when an extensive coinage became necessary, and the advantages of cheap and rapid coinage were greater for gold than for silver, gold was adopted in England as the sole legal tender. After the discoveries of gold in California and Australia, gold, which had entered into the double standard of Holland and Belgium, was demonetised, but, on the other hand, it largely superseded silver, and eventually became the single standard, in the currency of the United States. Again, by reason of an export of silver to the East, which ran its course from 1853 to 1866, silver, which had been over-valued in relation to gold, in the French currency, was practically expelled from it, making gold the real standard, though the law still recognises a double standard. Then, in 1865, Belgium by joining the Latin Monetary Convention, adopted afresh a double standard, with a relative value between gold and silver of 1 to 15½. Still more recently, Germany, by law, and Holland, through the operation of prices, have adopted gold as the single standard, and Belgium and Scandinavia are demonetising silver, while it is probable that Austria and Italy will resume specie payments in gold. The course of the metallic currency, then, has been—

1*st.*—A single standard—silver;

2*nd.*—A double standard—as commerce expanded, and silver alone was insufficient for its requirements;

3*rd.*—A gradual but steady progress to a single standard of gold, consequent on discoveries of gold in Australia and California;

leaving silver as practically demonetised just now, in Europe, the United States, those parts of Central and South America in which there is an inconvertible paper currency, and Australasia.

61. The gold coins of the countries above noticed in which gold is, or is to be, sole legal tender are as follows :—

	Standard weight.	Pure gold.	Value of pure gold contents of each coin.		
	Grammes.	Weight in grammes.	Francs.	Sterling.	
				£	£ s. d.
America—					
Eagle—					
Double or 20 dollars-piece	33·4364	30·0928	103·8152	4·1096	4 2 2·3
Single or 10 „ „ ...	16·7182	15·0464	51·9256	2·0548	2 1 1·15
½ Eagle or 5 „ „ ...	8·3591	7·5232	25·9628	1·0274	1 0 6·57
⅒ „ or 1 dollar „ ...	1·6718	1·5047	5·1926	0·2055	0 4 1·32
Japan—					
20 yen piece	33·3333	30·0000	103·3333	4·0971	4 1 11·30
10 „ „	16·6666	15·0000	51·6666	2·0485	2 0 11·64
5 „ „	8·3333	7·5000	25·8333	1·0242	1 0 5·80
2 „ „	3·3333	3·0000	10·3333	·4097	0 8 2·32
1 „ „	1·6666	1·5000	5·1666	·2048	0 4 1·15
Scandinavia—					
20 crown dollars ...	8·9605	8·0645	} 25·	1·1013	1 2 0·31
18 „ „ ...	8·0645	7·2581		0·9912	0 19 9·89
10 „ „ ..	4·4802	4·0322		0·5505	0 11 0·12
Germany—					
20 mark piece ...	7·9650	7·1685	24·6917	0·9790	0 19 6·96
10 „ „ ...	3·9825	3·5842	12·3458	·4895	0 9 9·48
5 „ „ ...	1·99125	1·7921	6·1729	·24475	0 4 10·74
France—					
25 franc piece (proposed) ...	8·0645	7·2581	25·	0·9912	0 19 9·89
20	6·4516	5·8065	20·	0·7930	0 15 10·32
10	3·2258	2·9032	10·	0·3965	0 7 11·16
5	1·6129	1·4516	5·	0·1982	0 3 11·57
Great Britain—					
Sovereign	7·9882	7·3224	25·2218	1·	1 0 0
Half sovereign ...	3·9941	3·6612	12·6106	·5000	0 10 0

All the foregoing are nine-tenths fine, except the British coins which are eleven-twelfths.

62. The silver coins in the undermentioned countries are—

	Standard weight; grammes.	Fineness of standard; grammes.	Pure silver, contents in grammes.	Legal tender up to.
England—				
Crown piece	28·276	·925	26·155	} 40 shillings.
Half crown	14·138	·925	13·078	
Florin	11·310	·925	10·462	
Shilling	5·655	·925	5·231	
Sixpence	2·828	·925	2·616	
France—				
5 Franc piece	25·000	·900	22·500	For any amount.
2 „ „	10·000	·835	8·350	} Up to 50 francs.
1 „ „	5·000	·835	4·175	
½ „ „	2·500	·835	2·087	
United States—				
1 Dollar (1853 to 1st April 1873) „ ...	26·729	·900	24·056	Discontinued by omission from Coinage Act, 1873.
Half dollar (50 cents) ...	12·500	·900	11·250	} Up to five dollars.
Quarter „ (25 „) ...	6·250	·900	5·625	
Dime (10 „) ...	2·500	·900	2·250	
Trade dollar (international) ...	27·212	·900	24·490	Exclusively for foreign use.
Mexican dollar—				
(Approximately) ...	26·957	·900	24·261	
Japan—				
One yen (international) ...	26·957	·900	24·261	For trade.
50 sen piece (½ a gold yen) ...	...	...	...	} 10 yens or £2-0-11d. nearly.
20 „ (⅖ „) ...	...	...	...	
10 „ (⅕ „) ...	...	...	...	
5 „ (1/20 „) ...	...	...	...	
Germany—				
5 mark piece ...	...	...	...	} 50 marks or nearly £2-10s.
3 „ ...	...	...	...	
1 „ ...	...	...	...	
Half mark ...	...	...	...	
Quarter mark ...	...	...	...	

63. The amount of gold coinage in the four principal countries which use gold coins, is given in the subjoined table, which is taken from the *Economist* of 29th June 1872, and for later years than 1871, from other sources. The additional statement in francs of the coinage of gold and silver in France is taken from the *Economist* of 31st August 1872. ~~The amount of silver coined in the United Kingdom is given in a table in Appendix C, para. 118.~~

	Gold Coinage.					Coinage of France.		
	England.	France.	United States.	Sydney.	Total.	Gold.	Silver.	Total.
	£ Millions	£ Millions	£ Millions	£ Millions	£ Millions	Francs Millions	Francs Millions	Francs Millions
1848 ...	2·452	1·600	·755	...	4·807	...	...	...
1849 ...	2·178	1·080	1·800	...	5·058	...	...	...
1850 ...	1·492	4·600	6·400	...	12·492	...	...	...
1851 ...	4·400	9·600	12·523	...	26·523	...	...	...
1848-51 ...	10·522	16·880	21·478	...	48·880	...	...	...
1852 ...	8·742	1·040	11·370	...	21·152	...	...	...
1853 ...	11·952	13·200	11·043	...	36·195	...	...	...
1854 ...	4·152	20·480	10·420	...	35·052	...	...	...
1855 ...	9·008	16·417	8·233	...	33·658	447·428	25·500	472·928
1856 ...	6·002	20·334	6·000	...	32·336	508·282	54·422	562·704
1852-56 ...	39·856	71·471	47·066	*A*	158·393	955·710	79·922	1,035·632
1857 ...	4·860	22·902	13·209	·767	41·738	572·561	3·810	576·371
1858 ...	1·231	19·548	10·578	1·343	32·700	488·690	8·663	497·353
1859 ...	2·650	*27·208	6·082	1·221	37·161	702·698	8·402	711·100
1860 ...	3,121	17·938	4·689	1·652	27·400	428·453	8·084	436·537
1861 ...	8·191	3·929	16·142	1·719	29·981	98·217	2·518	100·735
1857-61 ...	20·053	91·525	50·700	6·702	168·980	2,290·619	31·477	2,322·096
1862 ...	7·836	8·570	12·335	2·478	31·219	214·[illegible]	2·519	216·761
1863 ...	6·608	8·409	4·529	1·585	21·081	210·230	·330	210·560
1864 ...	9·535	10·954	4·796	2·699	27·984	273·843	7·297	281·140
1865 ...	2·367	6·475	6·137	2·272	17·251	161·887	9·222	171·109
1866 ...	5·076	14·603	7·486	2·911	30·076	365·083	44·821	409·904
1862-66 ...	31·422	49·011	35·283	11·895	127·611	1,225·285	64·189	1,289·474
1867 ...	·497	7·943	7·952	2·401	18·793	198·580	113·758	312·338
1868 ...	1·653	13·603	4·828	2·319	22·403	340·077	129·445	469·522
1869 ...	7·372	9·368	6·407	1·279	24·426	234·186	68·176	302·362
1870 ...	2·313	2·216	4·983	1·220	8·516	55.395	69·051	124·446
1871 ...	9·920	2·007	6·882	†1·250	18·052	50·170	23·879	74·049
1867-71 ...	21·755	35·137	31·052	8·469	92·190	878·408	404·309	1,282·717
1872 ...	15·261	...	... 1873-74 (to 30th June)	1·993	...	...	...	...
1873 ...	3·385	...	10·360	2·312				
1874 ...	1·462	·972	...	2·837	...	...	...	...
Total from 1848 to 1871	123·608	259·801 (Correct amount 264·024	185·579	28·799	597·787	...	...	...

* The gross amount coined in France in 1859 was £28·105 millions, but nearly a million was re-coinage. The figure here given is the net amount.

† Estimate only. *A.* £1·733 million to end of 1856.

N. B.—The amount of gold coined in Belgium in 1874 was £2·437 millions, and in Germany £5·5 millions.

The amounts of silver coined in the U.K is as follows:—

APPENDIX B.

Resumption of specie payments in the United States.

	Abstract.	Paras.
1.	Statement of revenue, expenditure, and debt of the United States, and of the premium on gold in each year from 1860-61 to 1875-76.	1
2.	The inconvertible paper currency, issued in 1862, reached its maximum in 1863. Thereafter, the borrowings for the war were on bonds bearing interest. On loans thus raised, for a nominal amount of 2,778 millions dollars, a cash or gold value of only 1,886 millions dollars was obtained. This has delayed resumption of cash payments.	3
3.	The loans bearing higher interest were converted into 6 per cent. 5-20s as opportunity offered. Between 1866-67 and a date before 1871-72 the conversion was completed.	4
4.	The war loans were raised within the United States;—and, almost in every year from 1861 to 1871, some new measure was adopted, or some explicit declaration was made by the Government or by Congress, with the view of convincing European markets that the interest on the bonds would be paid in gold, and the bonds be faithfully redeemed at par. These, and the considerable reduction of debt after close of the war, popularised the United States' stock, in time, in European markets.	5 to 8
5.	A funding scheme for the conversion of the 6 per cent. 5-20s. into stock bearing lower interest was promulgated in July 1870 and January 1871. It comprised the funding of 500 millions of dollars in 5 per cent. stock, and 1,000 millions in 4½ and 4 per cents. By February 1873 the funding in 5 per cents. was completed.	5 to 7
6.	Large amounts of the preceding stock, and of United States and American railway bonds, for money originally raised within the States, have been transferred to European markets, diminishing, to the extent of the transfer, the export of Californian gold to Europe.	9 & 10
7.	Owing to the premium on gold, and to the mode of quoting United States' stock on the London stock exchange, American securities were, up to November 1873, at a constant apparent discount, even when they were really at or above par. In that month the mode of quotation, that is, the stock exchange par between the dollar and sterling, was altered.	11
8.	Before the war the gold coin circulation of the United States was estimated at sums ranging from 275 millions of dollars to 170 millions dollars, exclusive of circulation in the Pacific States where specie payments were not suspended. The paper circulation of the several States' Banks before the war was 202 millions dollars. This latter was gradually displaced by successive issues of inconvertible paper of the United States and of National Banks. The former, or green-backs, rose to 450 millions of dollars in March 1863, from which it was reduced to 400 millions, exclusive of 27 millions of fractional currency in 1866, then in 1867 to 400 millions inclusive of the fractional notes, or to 356 millions exclusive. Afterwards in June 1874 the limit was raised from 356 to 382 millions, until, in January 1875, it was enacted that the amount should be gradually reduced to 300 millions.	12 to 15
9.	The national bank notes were issued against a deposit of United States' bonds *plus* a certain reserve of green-backs. When speculators for a rise in gold contrived to withdraw from banks the green-backs outside this reserve, a gold crisis was caused. On the other hand, during the harvest, when green backs were required in the interior to pay for it, a pressure on the restricted paper currency was felt. The limit for the issue of national bank notes was accordingly enlarged from 300 to 354 millions of dollars in June 1874, and the obligation to hold a reserve of green-backs against the national bank notes was cancelled. In the following January 1875 the limit on the issue of national bank notes was withdrawn on the sole condition that an equivalent in United States' bonds is deposited in the treasury.	16 to 20

	ABSTRACT.	PARAS.
10.	Circulation, metallic and paper, in 1861 and in 1875	21 & 22
11.	The green-backs have, under a decision of the Supreme Court in February 1870, ceased to be legal tender for debts contracted before 1862. Thereby many interests are concerned in the resumption of specie payments.	23 & 24
12.	The gold coin receipts from Customs dues exceed the gold coin payments of interest on debt; with the reduction of debt, and consequently of interest, this gold surplus increases. The sale of the gold yields a premium of considerable amount, which is rapidly neutralising the original loss from the deficient cash receipts for United States' bonds issued during the war (entry 2). When the funding operations shall have been completed, this gold surplus, and the total surplus, will be employed in cancelling green-backs.	25 to 29
13.	Besides the completion of the funding operations, the resumption of specie payments depends on the decrease of the premium on gold, which is to be brought about by an improving balance of trade in favor of the United States, such as may detain in the country a larger portion of the annual gold produce of California—by the substitution of the silver produce of Nevada for gold remittances,—which was done in the ordinary course of trade, from 1870 to 1874, so long as the price of silver favored the substitution,—and by the transfer, which is still in progress, of United States' bonds and other stock from the American to European markets.	30
14.	The trade of the United States shows a larger and more rapid increase of exports than of imports, especially in the trade with the United Kingdom, and particularly in the two exports of raw cotton and corn. The imports in fact show a decrease of 6½ millions in 1874 below the amount in 1871, while the exports show an increase of 13 millions.	31 to 34.
15.	The large increase in the exports of wheat from Canada to the United States also augments the balance in favor of the States, the trade debt of Canada being settled through the States. The exports of corn, from Canada and the United States combined, promise to rival the exports of raw cotton from the United States.	35
16.	At the same time the steady and rapid progress in the cultivation and export of cotton, whereby the production now exceeds the annual average of the five years before the war, has re-established the export in the European market on a footing which threatens the extinction of the export trade in Indian cotton.	35 to 49
17.	With the preponderance in the English markets, over all rivals, which has been obtained by the United States for their raw cotton and corn, and with their diminished consumption of imports, the resumption of cash payments by the date fixed, *viz.*, 1st January 1879, if not earlier, seems assured.	50 & 51
18.	For the resumption of specie payments, there will be required about 25 millions sterling in gold.	52 to 58
19.	Through the progress made by the United States towards a resumption of cash payments in gold, the adoption of a silver standard has become improbable, if not impossible.	59
20.	Mr. Wells, Special Commissioner of Revenue, established by careful investigation, and from incontrovertible evidence, that the wages of labor did not rise in the same proportion as the prices of necessaries rose from the inflation of the currency, and from the heavy import duties.	60

APPENDIX B.

Resumption of specie payments in the United States.

1. In estimating the future demand for gold for the ordinary requirements of the world's commerce, the probable period of the resumption of specie payments in the United States, and the probable amount of gold still to be obtained for that resumption, are important elements. For thoroughly appreciating them, it is necessary to enter upon the subject of the finances, debt, and currency of the United States since the outbreak of the civil war in 1861. The salient points are presented in the following table:—

Year ended 30th June.	Income.		Total.	Expenditure.		Total.	Surplus.	Deficit.	Debt (B.) See next page.	Premium on Gold.		Miles of Railroad.
	Customs.	Other revenue (A.) See next page.		Interest on debt.	Other expenditure.					Lowest.	Highest.	
	$ Millions.	$ Millions.	$ Millions.	$ Millions.	$ Millions.	$ Millions.	$ Millions.	$ Millions.	$ Millions.	Per cent.	Per cent.	
1860-61 ...	39·582	1·763	41·345	4·000	62·357	66·357	...	25·012	68·483	...	...	30,635
61-62 ...	49·057	2·879	51·936	13·190	461·554	474·744	...	422·808	514·146	...	...	31,256
62-63 ...	69·060	42·340	111·400	24·730	689·980	714·710	...	603·310	1098·793	1¼	34	32,120
63-64 ...	102·316	158·317	260·633	53·685	811·549	865·234	...	604·601	1733·810	22½	72½	33,170
64-65 ...	84·928	244·639	329·567	77·398	1212·915	1,290·313	...	960·746	2682·593	51½	186·	33,908
65-66 ...	179·047	378·986	558·033	133·068	387·683	520·751	37·282	...	2783 426	28½	134⅜	35,085
66-67 ...	176·418	314·216	490·634	143·782	202·947	346·729	143·905	...	2692·129	24⅞	67½	36,827
67-68 ...	...	...	335·510	...	...	308·869	26·641	...	2614·688	32⅛	46⅜	39,276
68-69 ...	...	...	370·944	...	...	321·491	49·453	...	2588·452	32⅛	50	42,255
69-70 ..	194·538	216·717	411·255	129·235	180·419	309·654	101·601	...	2480·672	19½	44⅛	47,253
70-71 ...	...	...	339·101	...	...	290·063	49·038	...	2353·211	10	23¼	54,686
71-72 ...	216·370	148·324	364·694	117·358	153·202	270·560	94·134	...	2253·251	8	15⅜	62,647
72-73 ...	188·090	134·087	322·177	104·751	180·488	285·239	36·938	...	2234·463	8¼	15⅝	69,158
*73-74 ...	163·104	126·375	289·479	107·120	178·633	285·753	2·345	...	2158·892	6	14	73,343
74-75 Reg. Est.	162·001	122·217	284·218	102·788	172·527	275·315	8·903	...	...	9	14⅜	75,156
75-76 Estimate	170·000	123·000	293·000	101·878	170·900	272·778	20·222	...	...	12¼	17·	...

* Calendar year.

	(A) Includes		(B) Debt bearing interest							
			In Gold.							
	Internal.	Direct.	Above 6 per cent.	6 per cent. (5-20s.)	5 per cent.	Total.	In Papér.	Total bearing interest.	Not bearing interest.	Total Debt.
	$	$	$	$	$	$	$	$	$	$
1860-61	...	...	...	...	...	68·483	...	...	...	68·483
1861-62	...	1·795	246·883	9·975	...	256·858	107·628	364·486	149·660	514·146
1862-63	37·641	1·485	259·555	168·880	...	428·435	259·168	687·603	411·190	1098·793
1863-64	109·741	·476	256·955	510·757	72·005	839·717	396·141	1235·858	497·952	1733·810
1864-65	209·464	1·200	330·635	606·569	172·770	1109·974	1114·452	2224·426	458·167	2682·593
1865-66	309·227	1·975	333·891	718·323	171·219	1223·423	1121·327	2344·750	438·676	2783·426
1866-67	266·028	4·200	311·927	1127·532	198·432	1637·891	625·804	2263·695	428·504	2692·199
1871-72	130·642	...	...	1374·884	415·567	1789·451	25·343	1814·794	438·457	2253·251
1872-73	113·729	...	...	...	...	...	...	...	...	...
1873-74	102·410	...	...	1213·228	511·025	1724·253	14·678	1738·931	519·961	2258·892
1874-75	105·099	...	....	...	...	...	...	...	...	...
1875-76	106·000	...	...	...	...	...	...	...	...	...

2. The first remark suggested by these tables is that the borrowing, in the form of an inconvertible paper currency, for the expenses of the civil war, nearly reached its limit in 1862-63, there having been only a small proportionate increase in 1863-64. As this means of raising money began to fail, recourse was had to loans bearing interest of which the interest was payable in paper, as well as to other loans of which the interest was payable in gold. Until 1863-64 more money was raised in the latter form;—but thereafter, up to 1865-66, the debt bearing interest payable in paper increased by 725·186 millions of dollars, against an increase of 383·706 millions in the loans bearing interest payable in gold. In a paper on the finances of the United States from 1861 to 1867, compiled from official records, Mr. Leonard Courtney (*Statistical Journal*, June 1868, page 204), observed: "It appears that the war-debt created amounted to 2,846·022 "millions of dollars less the pre-war debt of 68·483 millions, or 2,777·539 "millions. The greater part of this was issued at *par* in paper, and no "material error will arise if it be assumed that it was all so issued. Taking "the periodic growth of the debt, and correcting by means of Appendix D "(which shows the average premium of gold at New York, in each month "from 1862 to 1867), we find—

Half-year or period ending	Debt created.	Average value of paper.	Gold or cash value received.
	$	Par.	$
31st December 1861 (from 4th March) ...	199·057	...	199·057
30th June 1862	246·671	97	239·271
31st December 1862	207·457	80	165·966
30th June 1863	372·124	66⅔	248·083
30th September 1863	128·320	77	93·807
2nd February 1864	251·112	66⅔	167·408
30th June 1864	260·584	56½	147·230
31st October 1864	283·289	42½	120·398
31st March 1865	349·856	47	164·432
30th June 1865	315·638	70	220·947
31st August 1865	163·429	70	114·400
TOTAL ..	2,777·539	...	1,885·999

3. The insufficient cash or gold values obtained for the loans, and a like difficulty regarding the inconvertible paper currency, have delayed the resumption of cash payments; but, as will be presently seen, the expediency of such resumption has been recognised from the time of the termination of the civil war. It will be convenient, however, to follow, first, the progress of the debt.

4. The amount of the debt bearing interest in paper was reduced, as it fell due, by its conversion into the 6 per cent. 5-20s, which bear interest payable in gold. Into this stock the loans bearing higher interest, and temporary loans, were funded, until recently, as opportunity offered; and it has absorbed all the paper bearing more than 6 per cent. interest, which amounted to 311·927 millions of dollars on 30th June 1867.

5. The loans for the expenses of the civil war were raised entirely within the United States, and the measures for popularising them in European markets were inadequate during the war, and were unavailing, subsequently, until supplemented by other more effectual measures, which may be summarised as follows, *viz.*:—

1861.—In 1861, on the accession of Mr. Lincoln, as President, to the legacy of four years' deficits bequeathed to him by Mr. Buchanan, a loan of 10 millions of dollars was authorised, with a declaration that "the faith of the United States is "hereby pledged for the due payment of the interest, and the "redemption of the principal of the stock of Treasury notes "which may be issued under the authority of this Act;" and this declaration was repeated on 17th July 1861, when another Act authorised a further loan for the expenses of the civil war.

1862.—On 25th February 1862, simultaneously with the formal declaration of the inconvertibility of the paper currency, it was declared, by enactment, that the interest on United States bonds would be paid in coin; but this promise failed to allay the distrust of the bonds which was felt in commercial and financial circles in Europe.

1863.—On 26th May 1863, "the first formal declaration was made by "the Secretary of the Treasury in a letter written by his orders "to the President of the Revere Bank, Boston, that the "5-20s. would be redeemed in gold."

1865.—In December 1865, the sinking fund scheme,—which, since, has been only recently adopted in England,—was anticipated by Mr. McCulloch, the Secretary of the Treasury. He found, in his estimates for 1866-67, a surplus of 111·683 millions of dollars, and an interest charge of 141·542 millions; total 253·225 millions. He thought that the whole debt of the Union might be funded at 5 or 5½ per cent., and that, then, the surplus in excess of 200 millions of dollars being remitted in taxation, that amount of surplus might be set apart "annually for the payment of interest and the redemption "of capital,—the debt being liquidated, thus, in a period varying "from 28 to 32 years." The Secretary was at the same time of opinion "that the safe and simple way of sinking the "national debt is to apply directly to its payment the excess "of receipts over expenditure." His proposal for a surplus of 200 millions of dollars a year was disallowed.

„ —On the same occasion (December 1865) Mr. McCulloch ineffectually suggested "the propriety of improving the foreign credit of "the 5-20 bonds by a Congressional declaration that the prin-"cipal as well as the interest of them would be paid in coin."

1868.—In 1868, Mr. McCulloch still being Secretary, the Congress adopted in reference to the United States' bonds "a resolution "declaring all forms of repudiation odious to the American "people; and this is no doubt satisfactory, so far as it goes; "but still the question is not altogether set at rest, whether "the 5-20 bonds of the Republic may not be paid off in depre-"ciated greenbacks. * * Until all the greenback currency is "called in and cancelled, American commerce and finance can "never be regarded as in a sound condition. As matters now "stand, American credit does not enjoy the favor or occupy "the position to which the vast resources of the United States "justly entitle it."

1869.—"General Grant assumed official charge of the Presidency of the "United States in March 1869, and one of the first acts of the "new House of Representatives which then met was to declare "the inviolability of the public obligations, and to discoun-"tenance attempts made in the direction of repudiation."

1870 & 1871.—Schemes of funding, with the view of reducing the rate of interest of the 6 per cent. five twenties, were proposed in 1869 by Secretary Mr. Boutwell and by Mr. Sumner; the latter introduced into the Senate on 12th January 1870 a Bill which authorised three new kinds of bonds, bearing respectively 5 per cent., 4½ per cent., and 4 per cent. interest. "Those last-named are "to be forced on the National Banks, and are to be issued to any "amount that may be required. The other two descriptions of "bonds are to be limited to 500 millions each, and none of these "issues are to be so made as to enlarge the aggregate of the "national debt. * * * By the terms of the Funding Bill, "as it passed Congress on 13th July 1870, and as it was after-"wards modified on 20th January 1871, the payment of the "debt of the United States is fixed within certain terms. The Bill

"orders the issue of several new classes of bonds, *viz.*, 5 per cent. "to the amount of 500 millions of dollars, payable at the plea- "sure of the United States after ten years from the date of "issue;—4½ per cent. bonds to the amount of 300 millions "of dollars, payable after fifteen years,—and 4 per cent. "bonds to the amount of 700 million dollars, payable after "30 years. These bonds are payable, principal and interest, "in gold, the interest being payable half-yearly. * * The "Secretary of the Treasury is authorised to redeem such of "the old issues as he sees fit after giving notice, at par, in coin, "to be procured by the sale of the new bonds." The aggregate of these funded loans is to be 1,500 million dollars, including 500 millions at 5 per cent. and the rest at lower interest. On 30th June 1872 (table in paragraph 1) the 6 per cent. 5-20s. amounted to 1,375 millions, and 5 per cents to 415 millions, total 1,790 millions, of which the excess over 1,500 millions must apparently be redeemed with surplus revenue before completion of the funding operation, or else, the balance not so redeemed, nor absorbed by the increased issues of the National Banks, must also be funded, by amending the Act. In floating the first instalment of the new stock, *viz.*, the 5 per cents., in the London market, it was notified that "the bonds "may, at the option of the holder, be registered, and United "States Treasury cheques, for dividends thereon, will be sent "from Washington to the registered address of the holder in "any part of Europe, on the principle adopted by the Bank of "England in paying the interest on British Consols. For the "convenience of applicants, an officer of the United States "Treasury will remain for some time in London, and will "inscribe the registered bonds directly into the names of the "purchasers."

6. With the improving finances of the United States and the rapid reduction of their debt, the bonds of the States speedily gained in the London market. Mr. Wells, Special Commissioner of Revenue, in his third annual report in December 1869, estimated the "Federal, State, municipal, and joint stock "held abroad at 293 millions sterling, drawing an annual interest of 16 millions "sterling; and this foreign debt is undergoing rapid and constant increase in "settlement of adverse trade balance." Shortly after, the Secretary of the Treasury, in his report to Congress in 1869, stated: "It is impossible to ascertain "with precision the amount of our securities held in Europe; nor are there any "perfectly reliable data for ascertaining even what amount has gone there "annually since the first bonds were issued for the prosecution of the late war. "In his report of 1866 the Secretary estimated the amount of United States "securities of different kinds, including railroad and other stock, held in "Europe, at 600 millions of dollars. He soon after became satisfied that this "estimate was too low by from one hundred to two hundred and fifty millions. "It would be safe to put the amount so held at the present time, exclusive of "stocks, at 850 millions of dollars, of which not less than 600 millions are "United States bonds, nearly all of which have left the United States "within the last six years. The amount is formidable; and little satisfaction is "derived from the consideration that these securities have been transferred in "payment of interest and for foreign commodities, and just as little from the "consideration that probably not over 500 millions of dollars in gold values have "been received for these 850 millions of debt."

7. In March 1871, Messrs. Rothschild, Messrs. Baring, and other firms opened subscriptions in London for the first issue of 200 million dollars of the five per cent. funded loan of 1870, but only a portion was taken, and that, principally, in America. In August 1871, however, the balance (75 millions) of that issue of 200 millions was successfully placed in London. In 1872, the Alabama claims affected the popularity of United States' bonds; but after the settlement of the dispute in that year, by the Geneva award of 15½ millions of dollars, the bonds improved, and in February 1873 the balance of 300 millions

dollars (or the final portion of the 5 per cent. funded stock of 500 million dollars authorised by the Acts of 1870 and 1871) was issued. In the following year, 1874, proposals were invited on 2nd July "for all the United States 5 *per* "*cent. funding loan* then remaining unsold, amounting to 178·548 millions "of dollars, in response to which bids were received for 75·934 millions, in- "cluding one for 55 millions of dollars from Messrs. Rothschild and Sons "of London and Messrs. Seligman and Company of New York. Of the home "bids 10 millions of dollars were accepted, and a contract was made with "the firm first mentioned on 28th July to take positively 45 million dollars of "the bonds, with an option on the whole balance, *viz.*, 122·689 millions dollars, "till 31st January 1875." The amount was to be taken up by the contractors, in instalments, up to 31st January 1875, the Secretary of the Treasury agreeing to issue calls, for even dates with the subscriptions of the firms, "for the re- "demption of an equivalent amount of 6 per cent. 5-20 bonds, as provided by "the Act of 14th July 1870. The subscribers agree to pay for the said 5 per "cent. bonds in gold coin, in United States coin coupons, or in any of the 6 per "cent. 5-20 bonds called for redemption."

8. The funding operations under the Act of 1870 do not increase the principal, while they reduce the interest of the national debt, and promote its popularity as stock in the European market. Messrs. Satterthwaite and Company, reporting for the year 1871, stated: "There has been no diminution in the "demand for Government securities during 1871; the rapidity with which the "Government is reducing its obligations places its bonds in the foremost rank of "national securities; and investors, who two or three years ago would not touch "American bonds of any kind, now take them in preference to many European "bonds." And again in their report for 1872: "There has been *a steadily in-* "*creasing disposition* on the part of the (English) public to invest in United "States Government bonds"—so much so, that the *New York Chronicle*, reviewing the same year (1872), observed: "United States securities are increasing in favor "every year, and one of the most important features in regard to them is the "*remarkable scarcity* in the floating supply of bonds which is frequently noticed "in our (American) market." And the *Economist*, in reviewing the events of 1874, observed that the United States' bonds have improved in estimation, through floating of a further portion of the funded loan, and through purchases by the local Government. The German Government, and capitalists on the Continent, also now purchase the bonds. In 1874, though, in the course of remittances, 8 millions of dollars of these bonds were returned from Europe to the United States, yet the prices advanced there in the face of the new supply.

9. Thus it appears that of the war loans of the United States which were raised entirely within those States, perhaps the greater part has in the fourteen years from 1861 been transferred to European States, through the London market. The ultimate effect of the transfer must be to increase the amount of indebtedness on the balance of trade, and for payments of interest on debt, which the United States settle by exporting gold from California; but so long as the transfer has been in progress and while it continues, its immediate or first effect is to detain in the United States an amount of gold equivalent to the securities transferred, and so to facilitate progress towards a resumption of cash payments.

10. A similar effect has been produced by the transfer of very considerable amounts of stock of United States' railways to the London market. The enormous extension of railways, which is indicated by the figures in paragraph 1, was effected in the first instance by capital subscribed within the United States: but the iron imported for the railways from the United Kingdom had to be paid for in gold, failing a balance of trade in favor of America; and the transfer of the securities has detained an equivalent amount of gold in the country. Furthermore, the extension of the railways to the Pacific has created an immense export of grain to the United Kingdom from the Western States to an amount greatly exceeding the dividends payable to holders in Europe of United States bonds and railway stock. The *Economist* of 6th June 1874 contained a statement from the New York *Daily Bulletin*, supplied by an eminent banking house in Amsterdam, showing that of a total issue of 287¾ millions dollars, (or about £49·555 millions) of American railway bonds and

shares, the sum of 125⅔ millions dollars, or about £25·135 millions, was taken: "Most of the issues, it was explained, have been made within the last five "years," and of the 25 millions sterling taken, somewhat more than half was on account of railways which have since defaulted in the payment of interest, though it was hoped that some of them would recover, and pay arrears of interest.

11. In the *Economist* of 3rd July 1875, the United States funded 5 per cents are quoted at 103½ to 104. Lest the quotation should convey an unduly unfavorable impression, it is necessary to explain that on the stock exchange the par of these bonds, in sterling, is reckoned at 4 shillings the dollar, and the quotations of market price are those obtained by rectifying this conventional par by the premium on gold in New York. As explained in the *Economist* of 25th October and 15th November 1873, it was the practice in the English stock exchange to quote American securities at the exchange of 4*s*. 6*d*. to the dollar which is widely different from the real par: "The effect of employing this "fictitious par is, that American securities at par are quoted at 9½ per cent. "discount, and other quotations vary, in proportion, from the reality. * * To "allow for the difference between the (hitherto) stock exchange par, and the real "par, the current quotations in dollars are much below what they would be, "if the exchange at which they were to be converted into sterling approximated "more closely to the real exchange between the dollar and the pound. It is "proposed accordingly" (and the proposal has been carried out) "to substitute "4*s*. for 4*s*. 6*d*., and by this change the difference will be hardly appreciable, so "that the current quotations in future will represent somewhat closely the actual "proportion of the price of the stocks and shares quoted, to the price of issue "or nominal par. As it is, American securities are at a constant apparent dis-"count, even when they are at or above par, and the quotation is necessarily "puzzling."

12. The history of the debt "not bearing interest," or of the inconvertible paper currency, may now be traced. In 1861, before the civil war, the Federal Government of the United States had no paper currency. "The circulation of "the Union, at the beginning of 1861, consisted of gold and silver, and of notes "issued under the authority of the several States by banks established within "them. The amount of paper money in circulation on the 1st January 1861 "was 202 millions dollars, of which 150 millions had been issued in the loyal "States and about 20 millions in the border States. The (gold) coin in circu-"lation was estimated by the Director of the Mint at 275 millions of dollars"—(Mr. Courtney, *Statistical Journal*, June 1868, and Mr. Morton, December 1868.) But "Mr. Chase, in his annual report of 1862, gave it as his opinion "that 210 millions of dollars covered the whole supply (of gold coin). These "figures we (*New York Commercial and Financial Chronicle*, 25th December "1868) understand to include the circulation of the Pacific States" (where payments in specie have not been suspended), "which, taken at 40 millions "at that period, would leave 170 millions as the supply (of gold coin) in "all the other States—an estimate which probably is not at all under the "truth, it agreeing pretty nearly with the result (165 millions) obtained by "taking the average specie in the banks in 1859-60-61, *viz*., 85 millions, "and adding thereto one-half the bank-note circulation (163 millions) out-"standing with the people this side the Rocky Mountains, in the proportion "of one dollar in specie to two of notes." The circulation, according to these various estimates of the coin portion, was dollars 437 millions, 372 millions, or 367 millions of coin and notes, including 202 millions in the bank-notes of the several States.

13. The first issue of paper money by the Federal Government of the United States was in notes payable in gold on demand: 53·040 millions of dollars were issued in this form in 1861; but in authorising a first issue of inconvertible paper in February 1862 the limit of 150 millions then fixed for the latter was made to include the first-mentioned 53 millions.

14. By three subsequent extensions of the limit, in July 1862 and January and March 1863, a maximum limit of 450 millions of dollars was reached,

which was afterwards reduced to 400 millions, and the circulation has since been as follows, on various dates :—

	30th June 1863.	30th June 1864.	30th June 1865.	30th June 1866.	30th June 1867.	1st July 1872.	1st July 1874.
	$	$	$	$	$	$	$
Legal tender or greenbacks	390·995	426·573	433·161	400·891	371·992	357 588	382·077
Fractional	20·195	21·817	25·006	27·071	28·307	40·856	45·719
	411·190	448·390	458·167	427·962	400·299	398·444	427·796

The difference between these amounts and the amounts of debt not bearing interest, which are entered in the table in paragraph 1, consists of certificates of deposit of greenbacks, and certificates of coin deposited in the Treasury. The fractional currency originated in this wise. On 17th July 1862 an Act empowered the Secretary of the Treasury to issue postage and other stamps to be exchanged on demand for United States notes, and it prohibited any bank from putting into circulation notes of less than one dollar. On 3rd March 1863 the Secretary was empowered to issue fractional currency in lieu of postage currency to an extent not exceeding 50 millions of dollars, including notes and stamps.

15. On the termination of the war the inconvenience of an inconvertible paper currency was felt; and Congress on 12th April 1866 passed an Act empowering the executive Government to reduce the circulation to an extent not exceeding 10 millions of dollars within six months from the passing of the Act, and not exceeding 4 millions thereafter in any one month. "Under this Act "the executive Government reduced the amount of greenbacks in circulation "from 400 millions to 356 millions of dollars, being a reduction of 44 millions;" but the power of reduction was suspended by a subsequent Act passed in 1868. As, however, the issue of inconvertible paper, in time of peace, is considered to be opposed to the constitution, the Government of the United States, which had always been anxious to reduce the paper currency, held that the 44 millions of notes which had been cancelled could not be restored to the circulation, though the limit of 400 millions, last fixed by the law, had not been formally abrogated. These 44 millions of dollars formed a subject of contention between the inflationists and those who wished to restrict the paper currency preparatory to a resumption of specie payments. The pressure put on the Government for the issue of these 44 millions in the crisis of September 1873 was resisted; but at a later period, when the Government was in temporary need, a part of the amount was issued, raising the circulation to 382 millions of dollars;—and the Currency Act, passed by Congress in June 1874, fixed that amount as the maximum greenback circulation, while a still later Act of January 1875 has directed the gradual reduction of the issue to 300 millions.

16. Besides these greenbacks, a circulation of national bank notes was instituted in 1863. The contractors for war loans in 1861 had found it difficult to procure greenbacks, whence the Secretary of the Treasury, Mr. Chase, concluded that the banking corporations of the country, that is, the banks established under charters from the several States of the Union and known as State banks, had improperly increased their circulation. The notes of these State banks circulated within narrow local limits, outside which they were at a discount. As a means of establishing a uniform paper currency, and at the same time promoting loan operations, Congress passed an Act on 25th February 1863, and another enlarging Act on 3rd June 1864, under which banking associations might be formed with a capital of 50,000 dollars and upwards. Before commencing business it was incumbent on these banks to deposit, in the treasury, United States' bonds to the amount of not less than 30,000 dollars, against which they would receive "circulating" notes, *i. e.*, national bank notes, of denominations from 5 to 1,000 dollars, equal in amount to nine-tenths of the current market value of the bonds so transferred, but not exceeding the par value thereof. The total issues under these Acts were not to exceed 300 millions of dollars.

17. The associations or banks formed under these Acts are not to issue any other notes than the national bank notes supplied to them on their deposit of United States' bonds, and they were required to keep in hand a reserve of greenbacks to the following extent, *viz.* :—

1*st.*—(By the banks in 17 principal cities)—25 per cent. of the amount of their notes, and of the deposits with them.

2*nd.*—By banks or associations in other cities,—15 per cent. of their notes and deposits.

3*rd.*—The associations in the 17 principal cities (1) have to make their notes redeemable in New York, and to keep one-half of their reserve there. The national bank notes are convertible in greenbacks, which are the legal tender, and they are issued against a deposit of United States' bonds, any sale-proceeds of which would be realised in greenbacks; and the outlying associations or banks have to keep part of their reserve against both deposits and notes in 17 central cities, which in turn keep one-half of their similar reserve in New York.

18. The entire circulation rested, practically, on the maintenance, intact, in New York, of the reserves of greenbacks of the seventeen principal cities; but the law also permits the retention of the reserve in gold as well as in greenbacks.

Accordingly, among the devices of speculators for a rise in gold was one by which loans were obtained from national banks, in greenbacks, on the deposit of gold. The aggregate reserve of the banks remained at the limit prescribed, but the portion which, in a panic, is alone available for payments, *viz.*, the greenbacks, was reduced, while the gold portion of the reserve was effectually kept out of the market, since the banks would lose, and would invite a run on themselves, by issuing gold as legal tender at par while it commanded a premium in the market. The reserves in the New York banks in the three years ended in 1873 were as follows :—

		Reserve.			Percentage of	
		Specie. Dollars. Millions.	Legal tender. Dollars. Millions.	Total. Dollars. Millions.	Specie.	Legal tender.
1871	...	14·015	71·361	85·376	16·5	83·5
1872	..	19·912	53·920	73·841	27·	73·
1873	...	27·398	46·704	74·102	36·5	63·5

These figures and the foregoing explanation show that gold panics in New York have been caused not so much by a scarcity of gold in the country, as by its temporary locking up in banks, or its withdrawal from the market.

19. It should have been mentioned that the national banks are subject to usury laws, which prevent them from raising the rate of interest beyond a certain point, and so restraining the periodical flow of greenbacks to pay for the harvest. The Legislature accordingly interposed a remedy for the evils of an inconvertible but restricted paper currency, which the law limits to 382 millions of dollars, and which is artificially restricted, in gold-coin speculations, by retention in the hands of the speculators. By an Act passed on 3rd June 1874 "national banks are exempted from their previous necessity of holding a certain "proportion of greenbacks reserve against their circulation. The reserve of greenbacks is to be reckoned in future upon only the amount of their deposits." The banks are indeed required to deposit in the treasury, in greenbacks, 5 per cent. of their note circulation in addition to their deposits of United States' bonds, but the 5 per cent. deposit of greenbacks is reckoned as part of the reserve which the banks are required to keep in greenbacks against these deposits.

20 The limit of the issues of national bank notes was at the same time enlarged from 300 millions to 354 millions of dollars; but in January 1875, the Act then passed to provide for the resumption of specie payments on 1st January 1879, directed the gradual reduction of United States' notes from 382 millions to 300 millions of dollars, concurrently with any greater increase of national bank notes, which, henceforth, are to be issued irrespectively of any maximum limit, on the sole condition that an equivalent in United States' bonds, and 5 per cent. additional in greenbacks, are deposited in the treasury.

21. The *Economist* was of opinion, on 30th January 1875, that in the existing state of trade the circulation of national bank notes would increase but slowly. In January 1868 it amounted to 291 millions, or only 9 millions of dollars less than the limit then in force: on 1st October 1868 it was 295¾ millions; on 2nd October 1871, 315½ millions; on 3rd October 1872, 333½ millions; on 26th June 1874, 338½ millions. In his report for the fiscal year ending 30th June 1873, the Director of the United States' Mint observed that "the coin, "except as to the Pacific coast and territories, being as a general thing in "the treasury and banks, the present time is a favorable one for estimating "the amount of gold and silver coin in the country. From the most reliable "data obtainable the gold coin is estimated at 135 millions of dollars and "silver subsidiary coin at 5 millions; total 140 millions." In the report for the following year, ending 30th June 1874, the Director stated the amount of specie in the country on that day at 167 millions of dollars. The estimate shows a gain in the last two fiscal years of 38½ millions of dollars.

22. On the foregoing data the currency of the United States may be estimated, and may be compared with the currency of the United Kingdom, as follows:—

	United States.			United Kingdom.
	1861.	1875.	1875.	8th May 1875.
	$	$	£	£
	Millions.	Millions.	Millions.	Millions.
Gold and silver coin	210	* 167	33¾	102· †
United States' notes	...	354	70¾	35·302 ‡
National Bank notes	...	340	68	
States' Bank notes	202	Practically superseded by preceding.	...	17·902 §
	412	801	...	
	£82	172	172	155·204

* Includes 5 millions of silver tokens.

† Inclusive of 14 millions of silver currency.

‡ Bank of England notes.

§ Private and joint stock banks, English, Scotch, and Irish.

In a paper read before the Statistical Society in February 1871, Mr. Seyd stated that the total circulation of bank notes, and of gold and silver coin, amounted in Great Britain to 133 millions, in France to 300 millions, and in Germany (including copper coin) to 100 millions sterling.

23. In February 1862, when the United States notes or greenbacks were formally declared to be inconvertible, they were constituted legal tender in all transactions among the public, and, with two exceptions, in the payment of dues to or by the Government. The national bank notes are, with the same exceptions, legal tender in the payment of dues to or by the Government, but not in transactions among the public. The two exceptions are Customs import duties, and the interest on the public debt, which are payable only in gold coin.

24. In February 1870 the Supreme Court of the United States decided that Congress had no power to make United States' notes, or greenbacks, a legal tender for debts in existence at the time of the passing of the Act. The Philadelphia correspondent of the *Times* observed: "The large amount of debts "contracted prior to 1862, and still outstanding, makes this gain very large.

"Of State debts alone there are 185·334 millions of dollars, while of railway "loans there are over 200 millions. All the large cities too have similar "outstanding debts." The *New York Commercial Chronicle* observed: "As "an *immediate result of the present decision*, all outstanding bonds, and other "obligations, made prior to the passing of the Legal Tender Act (and which "have not been absolutely or constructively renewed in currency) *are restored to* "*a coin basis, principal and interest.* The direct influence of this may be "important on the general subject of a return to a specie basis. Probably not "less than 350 millions of State, city, and railroad bonds will thus become "specie paying. Besides this, deposits in savings banks prior to 1862, and, as "some claim, life insurance policies issued before that date, may be brought under "the same rule. Hence, if the applicability of this decision is thus extensive, "the people will be to a great extent familiarised with a coin currency, or at least "there will be all these additional interests drawing in that direction. The "cotton trade must soon follow, and after that other departments of business, "especially when the people see that they are only anticipating the inevitable "by a brief period. Another interest, we would remark in passing, is "also likely to be directly affected by this decision—*railroad companies*—whose "rate of fare is fixed under old statutes. The New York Central Road, for "instance, is restricted by Act of the Legislature to two cents per mile for "passengers. It is believed that there is no reason why they cannot now "demand two cents in specie if they so desire.

25. The gold coin receipts (import duties), and the gold coin payments (interest on debt), of the United States have been as follows:—

	1861-62.	1862-63.	1863-64.	1865-66.	1869-70.	1871-72.	1872-73.	1873-74.	1874-75.
	$	$	$	$	$	$	$	$	$
Import duties ...	49·057	69·060	102·316	179·047	194·538	216·370	188·090	163·104	162·001
Interest on debt ...	13·190	24·750	53·685	133·068	129·235	117·358	104·751	107·120	102 788
	35·867	44·330	48·631	45·979	65·303	99·012	83·339	56·984	59·213
Internal revenue ...	...	37·641	109·741	309·227	185·129	130·642	113·729	102·410	105·099
Bank taxes ...	...	...	...	...	...	6·523	6·830	7·030	6·896
Premium on gold sold...	...	...	...	...	...	9·413	Not known	5·038	1·353
Repayments by railways	...	...	...	...	...	·750	·514	1·029	·718

Those figures explain the tenacity with which the United States Government has maintained the heavy import duties. In 1872 the general scale was reduced by 10 per cent., and the duties on tea and coffee were abolished; but, otherwise, they have not been reduced since their imposition as war taxes. The amount obtained has been considerably greater since the peace, but the annual average of the three years 1869-70 and 1871-72-73 has not been since obtained. Still, the net amount of gold remaining after payment, in coin, of the interest on debt is considerable, and it must increase with the reduction of debt, though the gross revenue from the import duties may remain stationary. The premium obtained on sale of the surplus gold, and the income derived from bank taxes, *i. e.*, taxes on the note circulation of the national banks, are not distinctly shown in the accounts of earlier years, they having been included in miscellaneous; but, judging from the amount of decrease under miscellaneous since the two items were distinguished, the receipts from them, in those years, must have been near the amount in 1871-72. A charge for premium is incurred in redeeming bonds, but the amount slightly exceeds only a million sterling,—varies necessarily with the amount of purchases,—and has no connexion with the premium on the sales of gold by Government. The cash or gold value received on the war loans was less than their nominal amount by 178 millions of dollars, and the premium on sales of gold from 1863-64 to 1874-75 must have made good the greater portion of that loss.

26. The internal taxes include excise duties, income tax, license duties, and the like. These have been reduced, and a special income tax, outside that in the internal taxes, has been abolished, in preference to the reduction of the gold-producing import duties: possibly the ordinary income tax may, also, have been abolished, its pressure having been felt in the earlier years after

the close of the civil war. The bank tax is a tax on the circulation of notes by the banks, and on their deposits. For the four years from 1871-72 to 1874-75 the annual average amount obtained from these taxes was 6·819 millions of dollars, while interest at 5 per cent. on the maximum amount of greenbacks, *viz.*, 382 millions, would be $19\frac{1}{10}$ millions, but as the whole of the greenbacks will not be redeemed, but only the excess issue, the interest on only the latter should be reckoned as charge.

27. The United States' bonds issued during the war, and now practically included in the 6 per cent. 5-20s, are redeemable at par, that is, at a dollar in gold for every dollar expressed in the bond. It is not to the interest, therefore, of the United States Government to resume specie payments till the partial reduction of the 5-20s, and the conversion of the remainder into the four, four and a half, and fives of the new funded loan. Meanwhile the gold surplus of the Customs import duties, over the amount of interest on debt, is sold, and to the extent of the annual surplus of revenue over charge of the Federal Government, which is increased by the premium obtained on these sales, the amount of the old debt is reduced.

28. Even when the whole of the 5-20s shall have been converted into the new funded loans which bear lower interest, a high premium on gold would still prevent resumption of specie payments; and accordingly the possibility of reverting to specie payments on 1st January 1879, as fixed by the Act of Congress passed in January 1875, depends on the reduction, amounting well-nigh to disappearance, of the premium on gold. The premium in previous years is given in paragraph 1, and when the Act was passed it was only about 11 or 12 per cent., and on 22nd July 1875 it was $12\frac{1}{2}$ per cent., but once in March, and once again in June 1875, it had been 17 per cent. In past years the premium was reduced, mainly, from the gradual accumulation of gold, but also from the restriction of the greenback circulation, in the face of an expanding trade.

29. The appreciating of greenbacks, that is, a fall of the premium on gold, depends on the reduction of the amount of greenbacks and on the accumulation of gold in the country. The greenbacks represent a debt of the United States, which was incurred for part of the war deficits, and the only inexpensive way in which their amount can be reduced is by buying up a portion with the annual surplus of revenue over expenditure. For the present, however, that surplus is required, as has been seen, for reducing the 6 per cent. debt, and so facilitating the conversion of the remainder of that debt into the funded loans which bear lower interest. One-third of the funding operation was completed in 1873, or within three years after the passing of the Funding Act, and on completion of the remaining two-thirds the surplus of customs revenue over the yearly decreasing interest on debt will be available for buying up greenbacks. Until then any reduction of greenbacks below 300 millions of dollars is not to be expected, and any appreciating of them, beyond what may arise from their limitation to 300 millions, must be sought in the gradual accumulation of gold in the United States.

30. The shortest and cheapest way of accumulating gold in those States is to detain in the country as much as possible of the annual production of gold in California and British Columbia, which, before and during the war, was for the most part exported, and which, since the determination to resume specie payments, has been exported to a smaller extent, in settlement of the balance of trade against the United States, and in payment of the interest on debt, and of the profits on capital employed in those States, which are due to foreign investors. The annual production of California can be retained in the country in increasing measure—

1*stly*.—By the substitution of silver from Mexico and Nevada for gold in the annual remittance from the United States. This was done to a large extent, from 1870 to 1874, in the ordinary operations of commerce; the high premium on gold in the United States, and an increase of the supply of silver having rendered the operation profitable; but the continuing fall in price in London appears to have checked the importation of American silver into the United Kingdom in 1875.

2ndly.—By the transfer, in increasing amounts, to European markets, of United States' bonds and other stock of those States. Some material help, or relief from this source, may be counted upon every year (paragraphs 9 and 10).

3rdly.—By an increase of the excess of exports from the United States over the merchandise imported into those States.

31. The statistics of the values of the trade of the United States, particularly when expressed in sterling, have been much confused by the declaration of an inconvertible paper currency in 1862. In that year the premium on gold was small, and accordingly the values in the statistics until 1862 inclusive may be considered as gold values. The inflation of prices from the inconvertible paper began from the following year; and hence, from 1863 to the present time, the invoice, or dollar, prices of exports from the United States have been inflated prices, which are reduced to gold value by taking off the percentage of premium on gold. On the other hand—in the instance, say, of the United Kingdom—the invoice prices of imports thence into the United States are sterling prices, which, on values being declared at the Custom houses, are inflated to local currency prices by adding the premium on gold. In reconverting these imports from the local currency values back into sterling the exchange adopted is the nominal intrinsic par, formerly of 4*s.* 2*d.*, latterly of about 4*s.* 6*d.* a dollar, or, as often as not, 4 shillings the dollar, or five dollars to a pound, the effect of this reconversion being to restate the imports in sterling, in gold values, as given on the basis of the trade returns of the United States, at more than the invoice values as originally stated in gold.

32. Accordingly, especial care is necessary in ascertaining whether any statistics which profess to give the values of the trade shewn in the trade returns of the United States represent gold values or currency values. The following appears to be a correct statement of the trade in merchandise :—

Year ending 30th June.	Imports.		Exports.		Exports.		Another account gives for	
	Gold values.		Currency values.		Gold values.		Imports.	Exports.
	$ Millions.	£ Millions.	$ Millions.	£ Millions.	$ Millions.	£ Millions.	$ Millions.	$ Millions.
1860 ...	353·612	73·669	...	...	333·576	69·495	362·166	400·123
1861 ...	254·[illegible]	52·976	215·806	...	215·806	44·960	286·598	243·971
1862 ...	258·932	53·944	193·051	...	192·761	...	275·357	229·649
1863 ...	243·336	50·695	258·967	...	190·417	...	252·920	253·809
1864 ...	316·447	65·927	232·594	...	149·098	...	329·563	218·488
1865 ...	227·209	47·335	282·349	...	141·175	...	234·434	195·523
1866 ...	427·311	89·023	477·858	...	341·327	...	437·640	427·371
1867 ...	395·761	79·152	461·334	91·967	294·098	61·270		
1868 ...	357·436	71·487	476·903	95·381	281·699	58·687		
1869 ...	417·506	83·501	439·135	87·827	285·951	59·573		
1870 ...	462·378	92·476	529·519	105·904				
1871 ...	541·494	108·299	590·979	118·195				
1872 ...	572·510	114·502	561·808	112·362				
1873 ...	595·248	...	567·758	125·319				
1874 ...	562·116	...	569·872	117·257				

* These figures seem to include treasure.

33. As already observed, the imports are entered at inflated values, which overstate the amount of indebtedness that the United States settle by their exports of merchandise and bullion;—but even with this disadvantage it is apparent from the preceding figures that the exports from the United States are increasing more rapidly than the imports. The trade of those States may be fairly measured by their trade with the United Kingdom, which has been as follows, according to the returns of the Board of Trade, in which returns the

accounts are free from the uncertainty caused in the American returns by the inconvertible paper currency:—

YEARS.	EXPORTS TO THE UNITED STATES FROM THE UNITED KINGDOM.			IMPORTS FROM UNITED STATES INTO THE UNITED KINGDOM.					
	Iron. 1	Other. 2	Total. 3	Cotton, raw. 4	Corn. 5	Bacon & ham, lard, & hides. 6	Total. 7	Other imports. 8	Total. 9
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
1856	3·357	19·260	22·617	21·126	8·071	1·264	31·361	4·687	36·048
1857	3·170	16·907	20.077	21·555	3.933	1·533	27·021	6·626	33·647
1858	1·500	14·294	15·794	24·897	3 385	·651	28·933	5·325	34·258
1859	2·988	21·430	24·418	28·270	·237	·305	28 812	5·480	34·292
1860	3·136	19·772	22·908	30·069	6·921	1·117	38·107	6·620	44·727
1861	965	10·057	11·026	26·570	12·724	1·847	41·141	8·249	49·390
1862	1·381	17·793	19·174	1·221	14·764	3·339	19·324	8·391	27·715
1863	2·107	17·589	19·696	·644	7·431	3·454	11·529	8·043	19·572
1864	2·816	17·356	20·172	1·712	4·862	2·397	8·971	8·953	17·924
1865	1·622	23·549	25·171	12·036	1·309	1·368	14·712	6·912	21·624
1866	3·190	28·654	31·844	34·978	3·147	1·399	39·524	7·331	46·855
1867	3·298	20·822	24·120	25·721	6·724	1·345	33·790	7·256	41·046
1868	5·391	18·411	23·802	27·019	6·872	1·852	35·743	7·319	43·062
1869	6·443	20·345	26·788	23·707	8·595	2·039	34·341	8·232	42·573
1870	7·588	23·718	31·306	31·345	8·092	1·454	40·891	8·914	49·805
1871	9·224	29·469	38 693	33·091	12·408	3·483	48·982	12·152	61·134
1872	11·565	34·343	45·908	25·947	12·427	5·325	43.699	10·965	54 664
1873	8·003	28·695	36·698	31·545	18·172	7·457	57·174	14·297	71·471
1874	...	...	32·238	...	...	...	...	...	73·897

The imports from the United States exceeded the exports thereto from the United Kingdom by 13½ millions in 1856, 25 millions in 1860, 13 millions in 1861, and by an annual average of 19·254 millions from 1856 to 1861. After the close of the civil war, the similar excess ranged from 15 millions in 1866 at various sums of 17, 20, 16, and 18 millions up to 1870. In 1871 the excess rose to 23 millions, in 1873 to 35 millions, and in 1874 to nearly 42 millions with an intermediate fall in 1872 to 8·756 millions. The annual average of the excess in 1871 to 1873 was 22 millions, and in 1871 to 1874 it was 27 millions.

34. It is no doubt the case that if, with a favorable balance on trade of 15 millions a year, as the annual average from 1856 to 1860, the United States had to send gold to England, a somewhat larger trade balance in favor of those States, in the present day, will not arrest the export, thence, of gold, seeing that, in the interval, America has largely increased her indebtedness to Europe by her State loans, and her borrowings for railways. But various considerations have to be allowed for, on the other side:—1*stly*, as explained in paragraphs 9 and 10, the transfer of United States' bonds and railway stock, from the American market, where they were originally placed, to European markets, is still in progress, and while the transfer continues on an extensive scale, the capital amount of stock transferred to Europe must exceed the dividends thereon receivable in Europe, and the excess, whatever its extent, will supersede the export of a corresponding amount of gold from the United States; 2*ndly*, in former years, a considerable portion of the gold from California came to Europe, very probably for investment of the annual savings of the United States, owing to the superior credit possessed by European over American stock,—railways, and other,—but of late years local investments must have absorbed a large amount of the savings; 3*rdly*, the interest on the United States' stock, created since the war, and held in Europe, falls far short of the increased, and still increasing, balance of trade in favor of the United States.

35. It is seen furthermore from the table—

1*st*.—That the general exports from the United States (column 8) are increasing faster than the general imports (column 2).

2*nd*.—That the imports of iron into the United States, which expanded from 1868 to 1872, have since been declining; and as the main lines of railways in those States have been completed, and schemes for further extensions have collapsed, the decline is likely to continue, with the result of improving the trade balance in favor of the United States by some millions.

3*rd*.—That the North Pacific Railway, by enabling the farmers of the west to ship their corn and gain produce from New York, has given them command of the English market, which now receives its supplies of foreign corn principally from the United States and Canada, which latter gives passage, towards Europe, to produce of parts of the United States, and settles her account with England through those States. The quantities of wheat and of maize, imported from the United States and Canada for some years past, have been—

	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Wheat grain (including flour at 1 cwt. of wheat flour = 1¼ cwt. of grain)—									
United States ...	·986	5·092	6·753	15·320	15·057	15·625	9·634	21·775	27·206
British North America ...	·060	·835	·799	3·397	3·403	3·783	2·157	4·316	4·298
	1·046	5·927	7·552	18·717	18·460	19·408	11·791	26·091	31·504
Other countries ...	28·326	33·210	28·954	25·731	18·446	24·954	35·822	25·540	17·819
Total ...	29·372	39·137	36·506	44·448	36·906	44·362	47·613	51·631	49·323
Maize—									
United States ...	6·954	4·799	4·010	1·355	·023	7·319	16·981	10·762	13·455
British North America ...	·859	·338	·340	·034	·012	1·346	3·558	1·761	1·320
	7·813	5·137	4·350	1·389	·035	8·665	20·539	12·523	14·775
Other countries ...	6·510	3·403	7·122	16·275	16·722	8·160	3·994	6·300	2·919
Total ...	14·323	8·540	11·472	17·664	16·757	16·825	24·533	18·823	17·694

These figures show the pre-eminent position in the English market which the United States and the British North American Colonies have attained. The value of the imports of corn from those countries, as shown for the United States only, in paragraph 32, has been—

	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
United States ...	3·147	6·724	6·872	8·595	8·092	12·408	12·427	18·172	
British North America ...	1·079	1·506	1·078	2·037	1·309	3·121	3·003	3·820	
	4·226	8·230	7·950	10·632	9·401	15·529	15·430	21·992	

These amounts denote a trade in corn so much greater than the similar amount (9·764 millions) in 1856 as to represent virtually a new trade with the farmers of the West and in British North America, such as gives promise of rivalling the cotton exports from the United States to Great Britain which amount to 31⅛ millions sterling.

36. By the time (1865) that the civil war ended, the old negro labor for the Southern States had been reduced by one-fourth from deaths, from impressment or enlistment of negroes in the Federal Armies, and from the liberated negroes having swarmed to the large towns for employment. Taking this diminution into account, the *Economist*, in March 1869, did not feel "justified in expecting to see the American crop reach over 3 millions of bales "for a long time." But there had already begun, during 1868-69, an immigration of poor whites "from the old slave States, stretching from the

"Atlantic to the Mississipi, to the newer States on the Arkansas and Red "River, and to Texas;"—the whites "leaving almost *en masse*" and their places being taken by the emancipated negroes. Thereby the labor which is trained in cotton growing has been spread over a larger area, and the gaps caused through the immigration of whites from the older areas have been filled by the return of far more than a corresponding number of emancipated negroes, and by a general increase over the whole area, through the usual causes of the growth of population in America, and through the invitations which the new settlers send to their friends elsewhere to join them. On 27th June 1874 the *New York Commercial Chronicle* published the following statement of the area of cotton planted in the United States:—

Year.		Planted area. Acres. (Millions) 000s left out.	Crop. lbs. net. Millions. 000,000's left out.	lbs. per acre.	Bales in the crop.	Net weight of a bale. lbs.
Calendar.	Cotton season ending 1st September.					
1869	1869-70 ...	7,933	1,382	174	3,154,946	348
1870	1870-71 ...	8,886	1,915	216	4,352,317	440
1871	1871-72 ...	7,812	1,309	168	2,974,351	440
1872	1872-73 ...	8,868	1,726	195	3,930,508	440
1873	1873-74 ...	9,803	1,820	186	4,100,000	444
1874	1874-75 ...	9,034	...	...	...	...
Average ...	1873-74 ...	8,659	19,631	188	3,702,424	440

37. The crop of one season ending 31st August is brought into the market principally in the following calendar year: sometimes the produce is held back for a while, if prices in London, New York, and New Orleans be unfavorable; and impediments from this cause may be frequent so long as there is an inconvertible paper currency; for, even when the cent price in America does not vary, the price for foreign markets is altered through the corrections necessitated by changes in the premium on gold, the sterling price rising with the fall and falling with the rise of that premium, since the local price has to be diminished by the rate per cent. of premium on gold. The disadvantage under which the American production labors from this uncertainty is great; for a casual fall in the sterling price,—not from a lessened demand, but from fluctuations of gold premium—caused, may be, by machinations of the 'Gold Ring' in New York—can restrict the cultivation, if it occur at the season when the planters have to arrange for their new sowings. Thus, the season 1871-72 shows a diminished area under cultivation, and it appears from the 'Commercial History and Review of 1872' that "the *arrivals from America show a very serious decrease*, owing to "the reduced area placed under cultivation in consequence of the low range "of prices current in the spring of 1871, and the further diminution in "production caused by unfavorable weather during the picking season." This disadvantage will cease with the resumption of specie payments, which the increasing exports of cotton, corn, and provisions will hasten.

38. The extreme variations in the yield per acre which appear in the table in paragraph 36 are caused by favorable or adverse seasons: 1871 was, beyond all precedent, the most prosperous year of British commerce, and the yield per acre in the cotton year ending 31st August 1870 was the largest on record. The *Chronicle* estimated that with a very unfavorable season, as in 1871 (168 lbs. an acre), the cultivation of 1874-75 would give 3·400 million bales, or with a yield as in the second best year (1872) *viz.*, 195lbs. an acre, the production would be 4 million bales. On 19th December 1874, the *Chronicle* raised its estimate to 4·300 million bales, which Messrs. Ellison and Co. in their annual Liverpool report considered moderate. The

Bureau of Agriculture reported in the middle of June 1875 that "the pre- "sent condition of the crop is the best that has been known for five years, "with the exception of 1872;" and again, in July 1875, "that there is an im- "provement since June in every State but Texas," in which State there was not room for further improvement, it having, in the previous month, been reported the highest in regard to increase both in acreage and in condition. According to a later estimate there is a fair prospect of an American crop of $4\frac{3}{4}$ millions of bales. Evidently, the production is not only well maintained but is advancing.

39. Since 1866-67 the consumption of cotton in Europe has increased by one million bales, and the whole of this increase has been provided by American cotton, thus—

I.	Year ending 30th September							
	1866-67.	1867-68.	1868-69.	1869-70.	1870-71.	1871-72.	1872-73.	1873-74.
	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.
	(From Mr. Ott-Trumpler's Annual Report.)							
United States	1 495	1 572	1 362	2 084	2 887	1 913	2 323	2 508
Other	2 601	2 554	3 110	2 479	2 383	2 860	2 896	2 681
	4 096	4 126	4 472	4 563	5 270	4 773	5 219	5 189

From Messrs. Ellison's circulars.

II.	Annual average.		Calendar years.				
	5 years, 1856 to 1860.	5 years, 1866 to 1870.	1871.	1872.	1873.	1874.	1875 (Estimate).
	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.
United States	2 865	1 653	3 114	2 036	2 644	2 895	2 750
Other Countries	890	2 828	2 903	3 452	2 610	2 750	2 720
Total ...	3 755	4 481	6 017	5·488	5 254	5 645	5 470
America—							
United States	2 865	1 653	3 114	2·036	2 644	2 895	2 750
Brazil	153	614	680	1·006	623	637	640
West Indies	035	175	240	·237	191	192	190
	3 053	2 442	4 034	3 279	3 458	3 724	3 580
East Indies	540	1 601	1 538	1 696	1 290	1 439	1 450
Egypt and Mediterranean	162	438	445	513	506	482	440
	702	2 039	1 983	2 209	1 796	1 921	1 890
	3 755	4 481	6 017	5 488	5 254	5 645	5 470

It appears from the second section of the table that the supply from America, including Brazil and West Indies, has more than overtaken the supply from that source in the five years ended in 1860, and that in 1874 it amounted to the average annual supply from all sources in those five years, so that, if the demand for cotton in Europe had not increased in the interval, the exports of cotton from India might now have ceased.

40. A portion of the Indian cotton is exported from England to the Continent, and a further portion is exported direct from India to the Continent. The consumption of Indian cotton, on the Continent and in England,

has been ascertained, from Mr. Ott-Trumpler's reports available here, for only the three years from 1871-72 to 1873-74; it was as follows:—

Three 000s omitted.	1871-72.			1872-73.			1873-74.		
	England.	Continent.	Total.	England.	Continent.	Total.	England.	Continent.	Total.
	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.
India ...	·658	·703	1·361	·737	·795	1·532	·660	·872	1·532
United States ...	1·412	·501	1·913	1·654	·669	2·323	1·701	·807	2·508
	2·070	1·204	3·274	2·391	1·464	3·855	2·361	1·679	4·040
Other Countries ...	1·062	·437	1·499	·944	·420	1·364	·788	·361	1·149
TOTAL ...	3·132	1·641	4·773	3·335	1·884	5·219	3·149	2·040	5·189

American cotton is gaining more rapidly than the Indian in the Continental market, though of the total export, hence, of Indian cotton the consumption is greater on the Continent than in England.

41. The outturn of the American crop and its distribution have been as follows, according to the circulars of Messrs. Ellison, Liverpool, and Messrs. Neill and Brothers, New York:—

AMERICAN COTTON CROP.

Year.	Total crop, including deliveries from plantations.	Deliveries.	Detail of deliveries exported to			Great Britain.	Consumed in the United States.	Price of Raw Cotton		Price of Gold in New York.	
			France.	Other Foreign countries except Great Britain.	Total.			In New York, Middling New Orleans.	In Liverpool, Middling New Orleans.		
	Bales. Millions.	Bales. Millions.	Bales. Millions.	Bales. Millions.	Bales. Millions.	Bales. Millions.	Bales. Millions.	Cents.	Per lb. Pence.	Highest.	Lowest.
1859-60	4·823	4·746	·590	·515	1·105	2·669	·972	.....	7·00		
1860-61	.....	.....	.....	.....	.....	.....	.....	11	6·56		
1865-66	2·329	2·295	·221	·069	·290	1·258	·747	39¼	10·5	29	134
1866-67	2·204	2·404	·198	·139	·337	1·216	·851	27⅝	15·78	25	68
1867-68	2·498	2·543	·198	·230	·428	1·229	·886	* 22½	10·84	32	46
1868-69	2·439	2·464	·225	·234	·459	·990	1·015	23¼	10·75	32	50
									Mid. Upland		
1869-70	3·155	3·107	·346	·358	·704	1·475	·928	22	12·13	20	45
1870-71	4·347	4·303	·138	·649	·787	2·343	1·173	14¼	9·94	10	23
1871-72	2·975	3·056	·184	·319	·503	1·454	1·099	20 5/16	8·56	9	16
1872-73	3·930	3·881	·253	·621	·878	1·906	1·201	.....	10·56	9	16
1873-74	4·170	4·163	·371	·602	·973	1·868	1·332	.....	9·		
1874	.....	.....	.....	.....	.....	.....	.....	.....	8·		
1875	.....	.....	.....	.....	.....	.....	.....	14·88	.....		12½
								On 24th July 1875.		On 25th July 1875.	

* From British Consul's Report for New Orleans for 1872: The price of middling New Orleans varies only one cent, or a fraction of one cent., per lb. from the price of middling Uplands. The sterling prices are for calendar years—*i. e.*, the price entered against 1865-66 is for 1865, and so on.

In a paper read before the British Association in September 1870, Mr. Forwood, Vice-President of the Liverpool Chamber of Commerce, observed: "Seven "pence per pound for middling quality of American was considered the "normal value of cotton before the American war: this has been so far "changed that it cannot even be produced to sell here under 8½*d.* per lb. (some "authorities state the cost of production at a higher figure), the economy "effected by the improved mode of cultivation not compensating for the "increased cost of labor and provisions. It is to be hoped that, by the immi- "gration of Northern whites and Chinese coolies into the Southern States "the cost of production may be gradually reduced—but this is a work of "time. * * * At an average of about 9½*d.* per lb. for middling American, "we think sufficient profit would be returned to the cotton planter to sustain "his exertions in overcoming the difficulties which have yet to be surmounted before we can be confident of a regular and reliable full supply." In their review for 1873, Messrs. Ellison and Company adopted the first portion of this remark, observing: "We have repeatedly stated *that cotton cannot be produced* "*in America* and sold *in Liverpool under* 8*d. to* 8½*d per* lb. except at a loss to "some one concerned"; yet the average price in Liverpool, in 1874, was only 8 pence, and in 1875, with an increasing production, it was 7¼ pence in July 1875.

42. The remarks in the preceding quotations must be qualified by a reference to the continuous fall in the price of wheat, which lessens the wages of labor and cost of production, *viz.*:—

Wholesale Currency prices of certain leading articles at New York on 1st January of each year.

Years.	Gold.	Bread-Stuffs.							Cotton.		Provisions.	
		Wheat Flour.		Corn meal, Jersey.	Wheat.		Oats, State.	Corn, Western.	Middling Upland.	New Orleans.	Lard.	Butter, Cheese.
		State.	Ex West and St. Louis.		Spring.	Rye.						
		Bbl. $ c.	$ c.	Bush. $ c.	Bush. $ c.	Bush. $ c.	Bush. $ c.	Bush. $ c.	lb. $ c.	lb. $ c.	lb. $ c.	lb. $ c.
1861	Par	5 35	7 50	3 15	1 18	75	37	72	12¼	12⅜	10⅜	14
1862	Par	5 50	7 50	3	1 30	83	42	64	35½	36	8⅜	15
1863	133½	6 5	8 75	4	1 33	96	71	82	68½	68	10	22
1864	152	7	11 0	5 65	1 48	1 30	93	1 30	82		13	24
1865	227	10	15	8 80	2 22	1 75	1 6	1 90	1 20	1 21	23	45
1866	144½	8 75	14	4 25	1 85	1 5	62	95	52	53	19	31
1867	133	11	17	5	2 45	1 25	69	65	34	35	10	30
1868	133½	10	16	6 15	2 38	1 75	87	1 35	16	16½	12½	38
1869	135½	7	12	5	1 70	1 51	78	1 10	27	27½	17½	40
1870	120	5 60	8	4 70	1 28	1 3	65	1 13	25¾	25⅛	17½	31
1871	110⅝	6 35	9 25	3 80	1 44	98	62	78	15¼	15¾	12½	25
		Flour (*shipping*).			Wheat No. 2.			Corn No. 2				
1873 (31st December) ...	...	6 80	...	...	1 61	...	...	84	16¼	...	9	...
1874 („ „) ...	...	5 20	...	...	1 15	...	...	97	14⅜	...	13½	...

43. Cheap grain, low interest, and low transit charges, imply cheap production of cotton. For flour and wheat, the inflated price of 31st December 1874 with gold at a premium, was apparently less than in 1862, when gold was at par, thus evidencing a considerable increase of production. The rate of interest at New York is not known here, but on general considerations it seems certain that the rate has declined since the close of the civil war;—such are, 1*st*, that some causes which enhanced prices, and the rate of interest, have been neutralised, *viz.*, the destruction of capital and of much power of production by the civil war;—with the retrieval of these losses has ceased their attendant diminution of annual savings which, when increasing in amount, keep down the rate of interest; 2*nd*, that gold has fallen in price; 3*rd*, that the Federal Government has ceased to borrow, and that the raising of capital for the immense extension of railways, since the close of the civil war, has been completed. With the resumption of specie payments, the rate of interest must be reduced still further.

44. With respect to the third cause of diminished cost of supply of cotton for the European market, *viz.*, diminished transit charges, the great extension of railways, and other improvements of means of communication in the Southern States, have materially reduced transit charges to the principal ports from which American cotton is shipped to Europe.

45. Thus the tendency of prices in America is towards a cheaper production of cotton.

46. The position of American cotton, in the principal cotton market, *viz.*, that of the United Kingdom, may be seen in a little more detail in the following statistics of the imports into the United Kingdom :—

Years.	United States.	Brazil.	Egypt.	Total.	East Indies.	Other Countries.	Total.	Export.	Net Import.	Price of cotton in London.	
										Middling Orleans.	Fair Dhollera.
	lbs. Millions.	lbs. Millions.	lbs. Millions.	lbs. Millions.	lbs. Millions.	lbs. Millions.	lbs. Millions.	lbs. Millions.	lbs. Millions.	Per lb. Pence.	Per lb. Pence.
1858	833·2	18·6	38·2	890·0	133·7	10·6	1034·3	149 6	884·7	7·	5 50
1859	961·7	22·5	37·7	1021·9	192·3	11·7	1225·9	175·1	1050·8	7·	5·26
1860	1115·9	17·3	44·	1177·2	204·1	9·6	1390·9	250·3	1140·6	6·56	4·35
1861	819·5	17·2	40·9	877·6	369·6	10·3	1256·9	1298·3	958·7	9 06	6·31
1862	13·5	23·3	59·	95·8	392·7	35·5	524·	214·7	309·3	19·17	12·32
1863	6·4	22·6	93·6	122·6	434·4	113·1	670·1	241·4	428·7	24.35	19·59
1864	14·2	38·0	125·5	177·7	506·5	209·9	894·1	244·7	649 4	27·68	21·14
1865	135·8	55·4	176·8	368·0	445·9	164·6	978·5	302·9	675·6	19·50	14·72
1866	520·	68·5	118·3	706·8	615·3	55·4	1377·5	389·0	988·5	15·78	11·96
1867	528 2	70·4	126·3	724·9	498·3	39·7	1262·9	350·6	912·3	10·84	8·53
1868	574·5	98·8	129·2	802·5	498·7	32·5	1333·7	422·7	1006·	10·25	8·50
1869	457·4	79·4	160·5	697·3	481·4	42·9	1221·6	274 8	947·3	Middling Upland. 12·13	9·75
1870	716 2	64·2	143·7	924·1	341·8	73·8	1339·4	238·2	1101·2	9·94	8·125
1871	1088·7	86·2	176·2	1301·1	451·2	45·9	1778·2	362·1	1416·1	8·56	6·75
1872	625·6	112·5	177·6	915·7	443·2	49·9	1408 8	273·0	1135·8	10·56	7·5
1873	832·6	72·3	205·	1110·1	367·2	50·3	1527·6	220·	1307·6	9.	6 19
1874	884·1	79·5	171·2	1134·8	411·7	28·5	1575·	259·	1316·	8·	5·
1875	.....	.....	.....	.....	.....	.....	.....	(July.)		7·62	4·93
Annual average for—											
1859 and 1860 (2 years)	1038·3	19·9	40·9	1099·6	198·2	10·7	1308·3	212·7	1095·6	.....	.....
1866 to 1870 (5 years)	550·3	76·2	135·6	771.1	486	48·9	1306·0	315·	991·0	.....	.....
1871 to 1874 (4 years)	845·3	87·8	182·5	1115·5	418·3	43·7	1573·4	278·5	1293·9	.....	.....

47. The differences in the price of the various kinds of cotton represent differences in their quality. The cotton of Brazil is of substantially the same price, and that of Egypt is of nearly the same price, as middling Upland cotton of the United States. The mean length of staple is as follows:—Upland 1·02, Egypt 1·41, Brazilian 1·17, India, indigenous or native, 0·89, Indian exotic or American, 1·08 inch. In a paper of September 1870 by Mr. Forwood, Vice-President of the Liverpool Chamber of Commerce, already quoted, he observed with respect to the cotton famine from 1862 to 1865:—"During the whole of this period, while American cotton was so scarce, cotton "yarn and cloth had to be manufactured chiefly out of Surat and other "descriptions of short-stapled cotton. Spinners incurred considerable expense "in adapting their machinery to use these low classes of cotton, and there was "of course a considerable deterioration in the quality and color of both the "yarn and cloth: various devices of bleaching and sizing were resorted to, "to improve the color of the cloth, which had a very baneful effect in "causing mildew, and thus the character of our cotton manufactures has "deteriorated during the past ten years;—it is now improving again under "the fuller supply of American cotton." In their report on the cotton trade of the following year (1871), Messrs. Ellison, Tibbetts and Co., reviewing the large supplies during the year, and the large stock at its close, gave an opinion that, despite the price of 8½*d.* per lb., then ruling for Upland, "even-"tually a decline must ensue, unless the next American crop is a poor one. "We are quite aware of the fact that a large proportion of the present stock "consists of East Indian descriptions. This circumstance will make American "relatively dear, but it will not affect the general course of the market. Surat "cotton *is* cotton, and will be used. Just now East Indian cotton is com-"paratively neglected, because spinners are well supplied with American; but "the turn for Surats will come before long." And again, in their report for 1872, the same firm observed: "To importers of *East Indian cotton* the "year has been one of unmixed disappointment, owing to the tenacity with "which consumers (spinners), notwithstanding the high range of prices, "have clung to American and long-stapled cotton. The explanation is—*firstly*, "that the demand has been chiefly for the better grades and finer numbers "of yarn; *secondly*, that *the hands have persistently refused to work Surats*; "and *thirdly*, that the quality of the East Indian crop was exceptionally "poor. These circumstances, together with the further fact of the crops "having been hurried to the market, *viâ Suez*, at the same time as we were "receiving American, Brazilian, and Egyptian crops, have combined to keep "East Indian cotton throughout the year *far below its relative value*, and the "table given above shews, that, whereas the average advance in the price of "middling Uplands was 2*d.* per lb., the rise in fair Dhollera was only ¾*d.* "per lb." The italics in the preceding quotation are those of Messrs. Ellison.

48. It appears from these quotations—

1*st.*—That many of the spinners adjusted their machinery at great expense for working up Indian cotton, and that, under a necessity of working, even without profit, they will use Indian cotton, because it *is* cotton, if they can get nothing better; but, on the other hand, the workmen employed by these spinners in 1872 persistently refused to work Surats.

2*nd.*—The manufacturers of piece-goods and thread are interested in using yarn produced from long stapled rather than from East Indian cotton, the use of which latter has, with another practice, caused a deterioration of cotton manufactures, which, as is well known, has affected the reputation of the manufacturers in foreign markets. In consequence, East Indian cotton is neglected, so long as American, Brazilian, and Egyptian are available.

49. Keeping these facts in view, the following remarks are suggested by the table in paragraph 46, *viz.*:—

1*st.*—The importation of the long stapled cotton from the three gold-coin countries of the United States, Brazil, and Egypt has increased by more than 50 per cent. since 1866, while the

gross imports of East Indian cotton have fallen off in that period;—and were the exports of Indian cotton from England to the Continent known, perhaps the net imports would show a yet greater decline.

2nd.—The gross imports from the United States in 1874 were little short of the importation in 1859, notwithstanding the considerable direct exportation from the United States to the Continent; and the crop of 1874, which is providing the supply of 1875, will be larger than that of 1872 and 1873.

3rd.—The year 1860 is generally taken as the standard year of cotton supply, because the United States' production was larger in that than in any previous year. The gross import of all kinds of cotton in that year was 1,391 millions, and the net import was 1,141 millions of pounds; in 1874, the gross import of the three long stapled cottons had reached 1,135 millions, or an amount nearly as large as the gross imports of all kinds in 1859, and greater than the mean of the net imports in 1859 and 1860. On 2nd July 1875 the price of Uplands had fallen to 7¼ pence, or only a farthing more per lb. than the normal price before the civil war.

4th.—Even under the influence of the exceptionally high prices in the period of the cotton famine from 1862 to 1865, which affected the production down to 1866, and the supply of the United Kingdom down to 1867, the gross supply of Indian cotton for that market increased by only 246 millions of pounds in 1866 over the supply (369 millions) in 1861, though the United Kingdom could have taken much more; and in 1874 it was little more than the supply in 1861.

5th.—In 1874, the position of Indian cotton in the Liverpool market, compared with the latest position in 1861, or the pre-war period, was this. In 1874, the gross imports of United States cotton had nearly reached, and in 1875 they will probably have fully reached, the supply of that cotton in 1859, if not in 1860; so that Indian cotton can compete with other cottons for nothing more than the margin between the total demand and the United States' supply of cotton to the United Kingdom. In the interval, two formidable competitors with India, for this margin have arisen, the supplies of Egyptian and Brazilian cotton, which are more highly esteemed than Indian and as highly esteemed as United States' cotton, having risen from 60 millions of pounds in 1859, and from 61⅛ millions in 1860, to 250·7 millions of pounds in 1874, showing an increase of about 190 millions; while the net imports of cotton of all kinds into the United Kingdom in 1874 exceeded the net imports in 1860 by only 176 millions.

6th.—The difference in price between United States cotton and fair Dhollerah, in the pre-war period, and since, has been as follows:—

Per lb.

	1859.	1860.	1861.	1866.	1869.	1870.	1871.	1872.	1873.	1874.	1875.
	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
United States...	7.	6·56	9·06	15·78	12·13	9·94	8·56	10·56	9·	8·	7·62
Indian ...	5·26	4·35	6·31	11·95	9·75	8·13	6·75	7·5	6·19	5·	4·93
Indian less ...	1·74	2·21	2·75	3·83	2·38	1·81	1·81	3·06	2·81	3·	2·69

The difference in price,—constituting less price obtained for Indian than for American cotton,—has been greater in the period from 1872 to 1875 than in the years from 1860 to 1871, or than in the pre-war period. This would seem to imply that the quality of Indian cotton has been worse in the years

from 1872 to 1875, than it was in previous periods; and this no doubt is partly the case, as evidenced by one of the extracts in paragraph 47. But the fall in sterling price of Indian cotton should be considered in connexion with the fall in the exchange between England and India. The unusually low exchange from 1872 to 1875 has favored exporters from India;—as that low exchange is a loss by exchange to importers into India, so, conversely, it is a gain by exchange to exporters from India, who, so long as they retain that gain, and have not to part with it to producers in India, can afford to sell at a lower sterling price in England, the gain by exchange giving a profit, even should the sterling price yield no gain, or only a loss. Hence, though the sterling price of fair Dhollerah was 4 1/16 pence per lb. in July 1875 against 5 1/4 pence in 1860, yet the real decline was much less, if the prices be adjusted with the rate of exchange in the two periods and with the rates of freight which have been reduced, and be also arbitrated with the diminished expense of inland transit in India, owing to the extension of railways in the interval.

7th.—Still, all compensating causes told, and as the price of fair Dhollerah was so low as 4 1/4 pence on a date in July 1875, there is a decline in that price in 1875 below 1860; or, at best, the countervailing causes have barely neutralised the fall in sterling price, which price, at the amount in 1860, gave but a feeble impulse to the cultivation of cotton in India, while the prices of other agricultural products in India are higher now than in 1860.

8th.—When the gain by exchange shall have passed, as in the natural course of things, a great portion of it must pass, from the exporter of Indian cotton to the producer of it, the former may not be able to offer it in Liverpool at the existing reduced price of 1875.

50. It follows from these considerations that the importation of United States cotton into the United Kingdom is not likely to be checked by Indian cotton, but that, on the contrary, the former, and the Egyptian and Brazilian cottons, are likely to restrict the importation of Indian cotton into the United Kingdom.

51. Returning now to the main question, it appears that the means of remittance to England, in arrest of gold export, which is afforded by the cotton of the United States, is likely to increase rather than diminish in future, and that, together with the increasing exports of corn, the United States have good assurance, in these two staples of their export trade, of the means of rapidly accumulating gold for the resumption of specie payments, the date for which has been fixed for 1st January 1879 by the last Currency Act

52. The total circulation in the United States in 1874 (para. 21), compared with 1861, was—

	Gold and Silver coin.	United States' notes.	States Banks' notes (1861). National Bank notes (1875).	TOTAL.
	$ Millions.	$ Millions.	$ Millions.	$ Millions.
1861 ...	210	...	202	412
1875 ...	167	354	340	801
	£	£	£	£
1861 ...	43·152	...	41·507	84·659
1875 ...	34·316	61·830	59·465	155·611

In 1861 gold was at par, and the dollar amounts have been converted into sterling, for that year, at the intrinsic or mint par between the American gold eagle, or 10-dollar piece, and the sovereign, which was 49·316 pence per dollar. In 1875 gold is at a premium, and in converting the dollar amounts into sterling, for 1874, the gold coin has been converted at mint par, but the

paper money has been reduced by 15 per cent., for the premium on gold, and the remainder has been converted into sterling at the present mint par of 4·86 dollars equal to one pound sterling. Thus converted, it appears that the total circulation was about 84 per cent. more in 1874 than it was in 1861, but that the gold and silver coin circulation is nearly 20½ per cent. less than in 1861, and that the paper circulation is 192 per cent. more than in that year. Estimating the proportion of increase in the total trade of the United States by the increase of the trade of those States with Great Britain, the figures to be considered are—

	Imports.	Exports.	Total.	Increase.	Percentage of increase.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	
1860 ...	22·908	38·107	61·015	...	...
1873 ...	36·698	71·471	108·169	47·154	77
1874 ...	32·306	74·109	108·415	47·400	...

Besides the increase in the foreign trade there has, of course, been an increase of the home trade; but if the proportion of increase under this head may be fairly measured by the increase of population, then it has not been so considerable as the proportion of increase in the foreign trade; the population was 31,443,321 in 1868, and 38,558,371 in 1870, showing an increase of 22⅝ per cent. Banks have greatly multiplied in the interval between 1859, when there were nearly 1,500, and 1875: (there were 1,983 banks in June 1874 against 1,767 in October 1871) and with these have multiplied the means of economising currency (whether metallic or currency notes) by means of cheques, the Clearing house in New York, and the practice created by the financial arrangements during the civil war, by which the banks in the interior cities keep a portion of their reserves in 17 principal cities, and the banks in these latter keep a part of their reserves in New York (para. 17). On these considerations, it appears that the increase of circulation since 1861, in notes and in metallic currency, required for the increase of trade since that year need not have been so much as 75 per cent., while it reached 84 per cent. from over-issues of paper money. Accordingly, on resuming cash payments, the total circulation, paper and metallic, will admit of considerable reduction below its present amount.

53. Again, the metallic portion of the currency need not, in future, bear the same proportion to the paper money in circulation, as in 1861, mainly for two reasons:—

1*st*.—In the thirteen years from 1862—the people having become habituated to paper money, beyond all previous experience,—the proportion to coin of notes outstanding will in future be always greater than in 1861.

2*nd*.—The paper money for ordinary transactions is now the National banks' notes, in like manner as in 1861 it consisted of the several States banks' notes which were not legal tender. The notes gain increased currency on account of their convertibility into legal tender; but whereas in 1861 gold coin was the only legal tender, in future, on the resumption of specie payments, the legal tender will consist of both United States' notes and gold coin.

54. There will thus be a double economy of metallic currency, *viz*., first, from the diminished proportion, compared with 1861, which the legal tender reserve need bear to the National banks' notes circulation (1 of preceding para. 53), next, from the substitution of United States notes for gold coin, in part of the reserve of legal tender.

55. In his third annual report issued in December 1869, Mr. Wells, the Special Commissioner of the Revenue, United States, estimated that, with a proper amount of contraction in the paper currency, the amount of gold needed for the resumption of specie payments was 100 millions of dollars—in other words,—as, at the end of 1869, the amount of treasure in banks and in the sub-treasury was 112·5 millions, the total supply required was 212·5 millions, exclusive of gold coin then in circulation. According to the estimate of the Director of the Mint, the amount of coin in the treasury and in the banks which, he thought,

represented the total coin in the country (para. 21) was 167 millions of dollars on 30th June 1874: this would give a deficiency of 46 millions of dollars, or 10 millions sterling, as requiring to be made up for resuming cash payments.

56. Again it is probable that the Director of the United States Mint has erred in assuming that the gold in the treasury and in the banks is the bulk of the gold in the country. A certain amount must be in circulation for payment of the customs imports duties and of interest on the bonds of the several States, as well as on the bonds of the United States, and for other payments under the legal tender decision of 1870 (para. 24); and some millions dollars worth of gold must be in the hands of dealers, and in the hoards of timid persons. As observed by the *Economist* on 26th October 1872, "all "past experience proves that an inconvertible paper circulation always drives "gold into small hoards, and when that paper is withdrawn that gold comes out "again and resumes its place in circulation. This was so in the case of the "French assignats. While they were circulating there was no gold to be "seen, but when they were withdrawn no substitute was provided and none was "requisite. Immediately the old metallic currency came, so to speak, out of "its retirement, and filled the void."

57. On the other hand, it appears that on 26th June 1874, the National Banks held 103 million dollars of United States' notes, out of a total issue of 354 millions; of the remainder, *viz.*, 251 millions, a portion must have been in the United States' treasury and sub-treasuries:—similarly, of the 339 million dollars of National States' Banks' notes which were outstanding on 26th June 1874, a portion must have been held in the Federal Governments' treasuries. Assuming, however, that the whole of these sums, *viz.*, 251 + 339, or a total of 590 millions, was in circulation, then, on the resumption of specie payments this would consist of specie 196 millions and notes 394 millions, in the old proportion (of one dollar in specie for two dollars circulating in notes) which obtained in 1860 (para. 12) although the proportion of specie must be much smaller in future, than in the past, (paras. 52 and 53). Against the 394 millions of notes, a specie reserve of two-fifths may be reckoned, *viz.*, 158 millions, which, added to 196 millions of specie in circulation, would give a total of 354 millions, against 167 millions of dollars actually in the treasury and in the banks on 30th June 1874. The difference requiring to be made up would be 187 millions of dollars or 38½ millions sterling.

58. On these several considerations, also having regard to the estimate in December 1869 (para. 55), and allowing for the coin hoarded in the country, and for that in circulation outside banks, (para. 56), it may be held that an additional 25 millions sterling in gold would enable the United States Government to resume specie payments; and paying regard to the annual surplus of revenue over expenditure, to the progress in converting the old bonds into the new funded loans at reduced interest, and to the rapidly expanding export trade of the United States, the resumption of specie payments by 1st January 1879, the date fixed by the last Currency Act, is not improbable.

59. A hope, or a surmise born of the hope, has been sometimes expressed that the United States, among the countries which have an inconvertible paper currency, will resume specie payments in silver, thereby arresting the fall in the price of silver. The preceding narrative forbids such a hope: to decide now on establishing a silver currency of legal tender would be to undo the great progress already made towards the resumption of specie payments in gold, and to incur a heavy loss in discharging the interest, and in gradually redeeming the principal of the United States' debt, both of which are payable in gold, while the surmise implies that the means of payment would, in future, be accumulated in silver which exchanges at a disadvantage with gold. The surmise, or conjecture, may have been suggested, partly, by the efforts of President Grant to resume payment of fractional currency in silver. The last Currency Act of January 1875 authorised and required the Secretary of the Treasury "as rapidly as practicable to cause to be "coined at the mints of the United States silver coins of denominations of "10, 25, and 50 cents. of standard value and to issue them directly or through "the mints, sub-treasuries, public depositories and post offices in the United "States in redemption of an equal number and amount of fractional currency "of similar denominations." Silver has been coined in accordance with this

direction in the Act, but its issue has been prevented by the circumstance that dealers will find it profitable to tender fractional greenbacks for the silver currency in order to exchange it for gold at the market price. The *Economist* of 26th June 1875 remarks: "The difficulty is the opposite to one which "we may have soon to face in our silver currency if the price of silver should "fall much farther. Although our silver is alloyed, the price may fall so far "as to make it pay to coin silver coins possessing the legal weight and pure- "ness, and not distinguishable from coins issued from the mint."

60. Whether the currency of a country depreciates through the fall, abroad, of the price of the metal which is the standard of value, or from an inconvertible paper currency, the effect on prices in the country is the same. In his report for the financial year ending 30th June 1868 Mr. Wells, the Special Commissioner of the Revenue, "whose financial ability is almost as well known abroad as it is in his own country," investigated the subject of the increase of prices since 1860, from the inflation of the currency and from heavy import duties. "He says that *the average increase of price* from 1860 "to 1867, in groceries and provisions was 88 per cent., and house rents 65 per "cent., being a general increase, in the *living expenses* of a family, of 78 per "cent. Wages have also increased, but not in this proportion, the pay for un- "skilled mechanical labor having increased 50 per cent., and of skilled mecha- "nical labor 60 per cent. Unmarried men are better off than families, the "increase in the price of articles consumed by them not having been so great "as the increase in articles needed by families. He regards it as a fact, how- "ever, established by incontrovertible evidence, that the condition of the "working men and women in a majority of the manufacturing towns of the "United States *is not so good* at the present time as it was previously to the "war, although their wages are greater measured in gold, in 1867-68, "than they were in 1860-61. The *average weekly wages* of unskilled workmen "in 1860-61 were $ 6-4 c., and in 1867-68 $ 9-54 c. Assuming that in 1867 the "workman spent his entire earnings, $ 9-45 c., for the necessaries of life, it is "found that in 1860-61 the same necessaries could be procured for $ 5-52 c. "a week, so that 52 cents a week would then have been saved; and he argues "from this that the unskilled workman is in a worse condition by $ 27 a year "in 1867, with receipts at $ 9-54 c. a week, than he was in 1860-61 with "receipts at $ 6-4 c. a week. *Before the war* a barrel of flour represented the "average weekly earnings of an unskilled labourer. The price of flour has "advanced from 1860 to 1868 more than 90 per cent.; the price of labor of "all sorts, on the average, 58 per cent. The labourer, therefore, is not so well "off in flour as in 1860 by 20 per cent. To confirm this he has obtained "returns from a large number of manufacturing towns, and Mr. Wells concludes "that, on the whole, whether reckoned in money or in flour, it conclusively "appears that the working men and women of the country do not receive as "much in return for their labor as before the war."

APPENDIX C.

ANNUAL PRODUCTION OF GOLD AND SILVER, THE DEMAND FOR GOLD, AND THE DEPRECIATION OF SILVER.

	GOLD.	PARAS.
1.	Sources of information respecting the annual production of gold ...	1 to 4
2.	Table of annual production from 1848 to 1874	5
3.	Even on the preceding figures of the *Economist* there is no evidence of a diminished production of gold.	6
4.	The production of the United States has been understated by the *Economist* from its having treated the amounts of gold deposited in the Mints of the United States as the total production, whereas a great part of the annual supply does not pass through the Mints.	7 to 10
5.	Silver is the characteristic of the mines of Nevada in California, and hence the gross produce of Nevada is loosely returned as silver, but one-third of the production is gold.	11 to 13
6.	The amounts stated by the *Economist*, in the table in paragraph 5, as the production of gold in America, corrected in accordance with preceding entries 4 and 5.	14
7.	Not only has the production of gold in the United States not declined, but there is good prospect of an increase, through the recent extension of hydraulic mining, great improvements in working quartz mines, the working of new fields or mines, and the free investment of capital in mining enterprises.	15 to 26
8.	Summary of preceding review of the production of gold in California, showing that far from its having diminished it is on the increase.	27
9.	For Australia the table in paragraph 5 shows such a steady annual average production as to raise a strong presumption that the figures which denote a sudden decline of production from 9½ millions in 1870 to 8 millions in 1872 are inaccurate.	28
10.	Correction applied, showing a steady annual average production of 11½ to 12 millions sterling from 1852 to the end of 1873.	29
11.	Though, however, the total production has been ample, yet this has arisen from the discovery of new gold fields or mines in some of the Colonies of Australasia, which has counteracted a diminished yield in Victoria from the alluvial washings. But even in Victoria the production which had receded is now increasing from the abandonment of the alluvial washings for quartz mines, the great improvements effected in quartz mining, the discoveries of new quartz reefs, the working of formerly abandoned reefs, through the cheaper methods of working now discovered, and the free investment of capital in mining enterprise. There has also been discovery of new supplies of gold in the other Colonies.	30 to 36
12.	Summary of preceding, and correction of the figures from 1871 to 1873 in the table in paragraph 5.	37
13.	The diminished export of gold from Australia to the United Kingdom is owing to the decrease of the balance of trade against Australia, and to the vast local accumulations of capital in the Colonies which are evidenced among other ways by the low rate of interest in Australia.	38 to 40
14.	Even after the corrections applied in entry 12, the amounts assumed as the annual production of gold in Australia are short of the real amounts, as the bullion which the banks purchase direct from the miners is not fully known to the Government officers, even when exported.	41 & 42
15.	For the gold produced in Russia, the figures in the table in paragraph 5 may be adopted.	43
16.	Amount of total production of gold in America, Australia and Russia, as amended in entries 8 and 13. Average annual production 24⅝ millions in 1871 to 1873, against 21¼ millions in 1848 to 1856.	44
17.	In addition to the preceding sources of supply, there have been recent discoveries of rich gold fields or mines in South Africa, Inner Africa about the Upper Nile, and the French Colony of new Caledonia.	45 & 46
	SILVER.	
18.	Various exaggerated estimates of the annual production of silver, formed in 1857, 1864, and 1868, were at length corrected in an estimate by M. Herzog in 1874, which the *Economist* adopted, and which agrees substantially with the estimate of a German writer in 1875.	47 to 51

	SILVER.	PARAS.
19.	According to the amended estimates, the annual production of silver was 9 millions sterling in 1851, and 17·43 millions in 1873.	52 to 56
20.	In 1848 the stock of silver in the world was a great deal more, in 1873 it was somewhat less, or if the unequal proportion of wear and tear of gold and silver could be deducted, it was materially less, than the stock of gold in those years; yet the price of silver is less in 1873 than it was in 1848.	57 & 58
21.	While the facts are as stated above, journalists have endeavoured to explain the fall in price of silver by certain conjectures, *viz.*,—	59 to 64
	(*a*).—*That the production of gold has fallen off.*—This is apparently not the case (entry 16).	
	(*b*).—*The pressure of the demonetised silver of Germany on a market which was weak from the large production of silver in recent years.*—Germany has thrown but little silver on the market, and except in the mines of Nevada, which add one pound's worth to the stock of gold for every two pounds' worth added to the stock of silver, there has not been any ascertained increase of production of silver.	
	(*c*).—*The apprehension that the demonetised silver of Germany would be suddenly thrown on the market.*—It was known in March 1874, if not earlier, that Germany would not flood the market with silver, but would sell it gradually at reasonable prices.	
	(*d*).—*A final cessation of demand for silver from Germany, Belgium, and Holland, and a "possibly temporary" cessation or abatement of demand from China.*—These are the only facts in the explanations offered, but the same importance was not attached to them as to the preceding conjectures.	
22.	The silver to be set free from the German coinage, on the completion of the change to a gold standard, is estimated, including the portion of the war indemnity received in silver, at 62½ millions sterling. The amount of silver disposed of up to April 1874 was 1½ million sterling.	62 to 64
	FUTURE DEMAND FOR GOLD.	
23.	Postponing for a while the further investigation of the diminished price of silver, the probable future annual demand on the supply of gold may be considered under the heads,—1*st*, of the countries which require gold to alter their standard from silver to gold, or to resume specie payments; 2*nd*, of the countries which require an annual supply for replacing wear and tear, and for increasing their metallic circulation as their trade increases.	65
24.	Among the countries which will resume cash payments in gold, there will be required in gold by—	

	£ Millions.	
THE UNITED STATES	25	66
FRANCE—*Nil*; will set free 18 millions sterling, besides 40 millions sterling in silver		67 to 87
AUSTRIA—(Setting free 7 millions sterling in silver) ...	24	88 to 91
ITALY—(24 millions sterling, but the period for resuming specie payments is beyond any power of estimate)		92 to 94
RUSSIA—30 millions sterling in silver, but period or prospect of resuming specie payments is uncertain		95 to 99
SPAIN—Beyond the reach of estimate		100

25. Among the countries which are altering their standard from silver to gold, there will be required in gold by—

	Gold required. £ Millions.	Silver to be set free. £ Millions.	
GERMANY	64	59½	101 to 109
SCANDINAVIA (gold has been accumulated)	...	1½	110 to 113
HOLLAND	4	10	114 & 115
BELGIUM	7	10	116

26.	Annual demand for replacing wear and tear of coinage in circulation necessarily depends on amount of coinage and rate of wear and tear.	117
27.	Amount of imports and exports, and of coinage of gold and silver in the United Kingdom, in each year from 1858 to 1874.	118
28.	Customs returns of imports and exports of gold and silver are unreliable	119
29.	Amount of metallic currency in the United Kingdom in 1844, 1856, 1866, and 1874. Rate of increase about one million sterling a year; total gold currency in 1874, 88 millions.	120 to 124
30.	Gold circulation in France 150 millions sterling	125

		PARAS.
	FUTURE DEMAND FOR GOLD.	
31.	Statement of gold circulation existing or contemplated, in principal countries in Europe and in the United States. Total 471 millions sterling; required to complete coinage 67 millions; silver to be set free 101 millions.	126
32.	Annual wear and tear of gold in circulation is too insignificant to be regarded in estimating the demand, for ordinary requirements, on the current annual production of gold.	127 to 129
33.	Annual requirement for additions to currency on account of increasing trade and for consumption in the arts, 10 millions sterling.	130
34.	Examination of *Economist's* estimate of 12 millions a year as the ordinary annual requirement of gold.	131 to 135
35.	Preceding examination reduces the *Economist's* estimate from 12 to 6 millions; and another method of enquiry for testing this result gives a result of 7 millions a year.	136 to 143
36.	The estimate of 150 millions sterling as the gold currency of France is as large as the gold coin circulation of England and Germany together. The present state of the French coinage has been brought about by bullion operations in the past, for withdrawing silver from the French currency by substituting gold; the amounts of gold as principal, and of silver as subsidiary, coinage have not therefore been adjusted to the retail transactions in France, which are immense; the gold coin was substituted wholesale for silver, in the mass of retail transactions for which a subsidiary silver currency is sufficient. By a reform of the coinage, on the principle of the new German coinage, 70 millions of gold would be liberated.	144 to 147
37.	In like manner it may be expected that the United States and Austria will economise 26 millions sterling of gold by the substitution of a silver subsidiary coinage, with an enlarged limit of legal tender, for the present minimum gold coin piece.	148 to 151
38.	An amount equal to the whole of the silver produced from 1853 to 1856 was exported to the East, whereby a corresponding amount of increase of gold production, which otherwise would have caused a disastrous revolution in prices, was absorbed in the West, without doing harm.	152 to 154
39.	The special demands for gold for the countries which are altering their standard, or are about to resume specie payments, will have been fully met by 1879. Thereafter the demand for ordinary requirements on a total annual production of 24 millions will be ten millions, besides the possible contingency that 78 millions of gold may be set free by France, the United States, and Austria (entry 37).	155 to 158
40.	This large surplus of 14 millions a year cannot be absorbed in the West without revolutionising prices; and at the same time, the best part of an annual production of 18 millions of silver, and a further hoard of 145 millions accumulated in the countries which have demonetised or are demonetising silver, will await disposal.	159
41.	From 1853 to 1874 the large annual surplus of gold production was absorbed in the West by formally or practically demonetising silver and sending it to the East. This expedient cannot be repeated with the surplus mentioned in entry 39, silver being now completely demonetised outside Asia.	160 to 164
	PRICE OF SILVER.	
42.	Unless silver be demonetised in the East, the hoards of it now accumulated in Europe, and the surplus of the annual production, will flow to the East, not in settlement of a balance of trade, but as merchandise for which the retention of silver, as legal tender in the East, creates a fixed market value irrespective of the depreciation of silver in the West.	165
43.	From 1833 to 1850 the price of silver fluctuated at about 59½ to 60 pence an ounce; thereafter the price rose above 60 pence, and ranged from 1853 to 1866 above 61 pence from a special demand for silver, which has ceased. Owing to this cessation of special demand, and of much of the ordinary demand which prevailed up to 1850 (while the production of silver has increased), the price not only receded from 1867 to 1874 to the lowest rate which had obtained between 1833 and 1850, but even decreased in 1875 7 per cent. below such lowest rate.	166 to 172
44.	This reduction has occurred without any of the immense hoard of silver in Europe having as yet been thrown on the market; and the consequences to India when that hoard is sold cannot be regarded without dismay, if silver is to continue as the standard of value in this country.	173 & 174
45.	Summary	175

APPENDIX C

Annual production of gold and silver, the demand for gold, and the depreciation of silver.

From time to time estimates of the annual production of gold and silver have appeared in the *Economist*;—of gold, from 1848, the year of the discovery of gold in California. Elaborate reviews of the information on the subject appeared in the issues of the *Economist* for 3rd August 1872, 15th February 1873, and 16th January 1875, and the conclusion stated was that the production of gold has been, and is, diminishing.

2. The sources of production of gold, of which account was taken, wer Australasia, the United States, and Russia, as the only countries which need be considered in the matter; for the miscellaneous supplies from Africa (West Coast), South America, and other regions are only (the *Economist* states) £275,000 a year;—and from the Persian Gulf into India £240,000: total £515,000.

3. For Russia, the figures obtained by the *Economist* were from private sources, but that journal believed them to be complete. For Australasia, the net exports to other countries, *plus* the coinage at the Sydney and Melbourne mints, were held to represent the total production. For the United States, "we (*Economist*) assume that the deposits of gold of domestic production at the mints will virtually include everything, as gold-ore or dust is not an article of export, and the only way miners can make their gold merchantable is to pass them through the mints. It is also to be noticed, in passing, that the United States coinage includes the manufacture of gold-bars, as well as of ordinary coins."

4. The Director of the United States Mints furnishes an annual report of the deposits of gold at those mints, and he publishes, in an appendix to his report, an estimate, by the United States Commissioner of Mining Statistics, of the production of gold in the United States. The *Economist* in the article of 16th January 1875 wrote: "It is also fair to observe that the United States Commissioner of Mining Statistics, in the appendix to the last mint report, estimates the production of gold in the United States uniformly at two or three millions a year higher than the amount of the deposits of gold of domestic production at the mints of the United States, which we have taken as an authentic record. The Commissioner, however, does not show in detail how his estimate is made up, and, for purposes of comparison between one period and another, it is, of course, more convenient to continue the set of figures which we have formerly used."

5. Mr. J. A. Phillips, Mining Engineer, in his work on the "Mining and Metallurgy of Gold and Silver," edition 1867, published official statistics both of the total gold production and of the portion thereof which passed through the mints of the United States. His figures are embodied in the following tables, which, in every other particular, are those attached to the articles in the *Economist* abovementioned:

	1	2	3	4	5	6	7	8	9	10	11
		COMMISSIONER OF MINING STATISTICS.			TABLES FROM THE "ECONOMIST."						
	Gold of domestic produce deposited in the Mints of the United States.	TOTAL PRODUCTION OF GOLD IN THE UNITED STATES.			United States.	AUSTRALASIA.			Total new sources.	Russia.	TOTAL.
		California.	Other States.	TOTAL.		Victoria.	New South Wales.	TOTAL.			
		At 4 shillings per dollar.			I.—Statement taken by the *Economist* from the "History of Prices," Vol. 6, page 150.						
	Mr. Phillips' work										
	£	£	£	£	£	£	£	£	£	£	£
1848 ...	From 1848 to 1856, both years inclusive, £65,848 millions.	2	...	2	...	...	...	...	...	...	...
1849 ...		8	...	8	1·770	...	...	...	1·770	3·650	5·420
1850 ...		10	...	10	5·500	...	...	...	5 500	3·390	8·890
1851 ...		11	...	11	9·070	·480	·510	·990	10·060	3·460	13·520
		29	...	29	16·340	·480	·510	·990	17·330	10·500	27·830
1852 ...		12	...	12	12·870	6·740	3·960	10·700	23·570	3·460	27·030
1853 ...		13	...	13	13·760	9·530	1·950	11·480	25·240	2·840	28·080
1854 ...		12	...	12	15·510	9·080	·850	9·930	25·440	2·840	28·280
1855 ...		11	...	11	14·740	12·430	·230	12·660	27·400	2·840	30·240
1856 ...		11	...	11	15·400	13·900	·110	14·010	29·410	2·840	32·250
		59	...	59	72·280	51·680	7·100	58 780	131·060	14·820	145·880
	65,848	88	...	88	88 620	52 160	7·610	58 770	148·320	25·320	173·710

	Mr. Phillips.	Commissioner of Mining Statistics.			II.—Compiled by the *Economist* from official publications.						
					Deposits of gold at United States Mints.	Net export from Australia.	Coinage of Sydney Mint.	Total.	Total of new sources.	Russia.	Grand Total.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£	£	£	£	£	£	£
1857 ...	12·	11·	...	11·	12·000	11·329	·767	12·096	24·096	3·549	27·645
1858 ...	8·195	10·	...	10·	8·195	11·419	1·343	12·762	20·957	3·454	24·411
1859 ...	5·443	10·	...	10·	5·441	11·640	1·221	12·861	18·302	3·156	21·458
1860 ...	5·792	9·	·200	9·200	3·792	10·186	1·652	11·838	15·630	3·053	18 683
1861 ...	6 844	8·	·600	8·600	6·839	10·916	1·719	12·635	19,474	2·980	22·454
	38·274	48·	·800	48·800	36·267	55·490	6·702	62·192	98·459	16·192	114·651
1862 ...	6·195	6·940	·900	7·840	6·195	10·455	2·478	12·933	19·128	2 990	22·118
1863 ...	4·124	6·	2·	8·	4·124	11·468	1·535	13·003	17·127	2·988	20 115
1864 ...	4·510	5·320	3·900	9·220	4·410	9·025	2·699	11·724	16·134	2·862	18·996
1865 ...	5·222	5·700	4·945	10 645	5·222	9·533	2·272	11·805	17·027	3·227	20·254
1866 ...	5·794	5·100	5·600	10·700	5·794	9·618	2·911	12·529	18·323	3397	21·720
	25·845	29·060	17·345	46·405	25·745	50·099	11·895	61·994	87·739	15·464	103·203
1867 ...	...	5.	5·345	10·345	6·139	8·783	2·401	11·184	17·323	3·377	20·700
1868 ...	...	4·400	5·200	9·600	4·341	9·351	2·319	11·670	16·011	3·503	19·514
1869 ...	...	4·500	5.400	9·900	5·514	10·382	1·279	11·661	17·175	3·617	20·792
1870 ...	...	5·000	5.000	10·000	5·179	9·000	1·220	10·220	15·399	3·837	19·236
1871 ...	...	4·000	4·700	8·700	5·461	9·500	1·250	10·750	17·211	3·600	20·811
	...	22·900	25·645	48·545	27·634	47·016	8·469	55·485	83·119	17·934	101·053
1872 ...	...	3·800	3·400	7·200	2·466	5·983	1·993	7·976	10·442	4·500	14·942
1873 ...	...	3·400	3·800	7·200	5·775	9·444	2·312	11·756	17·531	4·500	22·031
1874 ...	...	...	...	...	5·947	6·720	2·000	8·720	14·667	4·500	19·167
	...	...	...	...	14·178	22·157	6·305	28·462	42·640	13·500	56·140
					ABSTRACT.						
1849-56 (8 years)...	65·848	88·	...	88·	88·620	52·160	17·610	59·770	148·390	25·320	173·710
1857-62 (6 years)...	44·469	54·940	1·700	56·640	42·062	65·945	9·180	75·125	117·587	19·182	136·769
1863-70 (8 years)...	...	41·020	37·390	78·410	40·723	77·160	16·636	93·796	134·519	26·808	161·327
1871-73 (3 years) ..	...	11·200	11·900	23·100	14·702	24·927	5·555	30·482	45·184	12·600	57·784
											529·590

6. Even on the figures of the *Economist*, which appear to greatly understate the total production in recent years, there was no evidence of a diminished production of gold down to 1870, the amounts having been—

		Old sources.	New sources.	Total.	Annual average.
		£	£	£	£
1849-56	... 8 years	25·320	148·390	173·710	21·714
1857-62	... 6 „	19·182	117·587	136·769	22·795
1863-70	... 8 „	26·808	134·519	161·327	20·166
TOTAL	... 22 years	71·310	400·496	471·806	21·446

In the earlier years the statistics of mining in California were not accurately kept, and ignorance is apt to magnify or exaggerate. Much of the new gold, in the earlier years, was also used not for the ordinary requirements of trade, but for special requirements of the mining countries;—for constructing the harbour of San Francisco, the government buildings and private residences in towns in California (and in a less degree in Australia), the additional ships needed for the suddenly expanded trade of the world; also for the large capital sunk in plant and machinery for mines, in hydraulic works, in railways in the mining countries, and the like. The exceptional demand for gold caused by these special requirements ceased, for the most part, when those requirements were met; if these several considerations be allowed for, the effective supply of gold for the ordinary requirements of trade was larger in the recent years down to 1870 than in the earlier period. But we are more immediately concerned, at the outset, with the figures for the United States.

7. According to the portion of the preceding table which is adopted by the *Economist* as presenting the true account of the production of gold, that production amounted in the United States to 11 millions sterling a year from 1849 to 1856 on the authority of an estimate by Mr. Newmarch in the "History of Prices," Vol. 6;—but (judged by the amounts deposited in the mints of the United States) the production fell in the next six years from 1857 to 1862 to 7 millions, and in the subsequent eight years from 1863 to 1870 to 5 millions. Mr. Newmarch's figures, however, show the total production, not the smaller amounts deposited in the United States mints, and, though differing in the detail for the several years, their aggregate of 88½ millions sterling of total production from 1849 to 1856 agrees with the similar aggregate of 88 millions given for the same period by the Commissioner of Mining Statistics. Mr. Newmarch's figures down to 1856 are accordingly not comparable with the amounts deposited in subsequent years in the mints of the United States; yet it is this comparison that has created the impression of a diminished yield of gold in California.

8. Mr. Phillips' statistics of the amounts deposited in the mints of the United States agree with those of the *Economist;* but he gave also other statistics of the total production of gold, which were identical with those quoted in the preceding table from the reports of the Commissioner of Mining Statistics as given in the *Economist*. It appears from columns 4 and 5 of the abstract in the table that the total production exceeded the amounts deposited in the mints from—

		£ Millions.	£ Millions.
1857-62	(6 years) by ...	14·178	2·363
1863-70	(8 years) by ...	37·687	4·711
1871-73	(3 years) by ...	8·398	2·796

It stands to reason that there should be this excess. The United States mints make a charge for coinage, or for assaying and stamping gold bars, which latter work is done cheaper by private assays; hence, that considerable part of the total production which is required for bullion remittances abroad, and not for the currency of the United States, does, in all practicable cases, avoid the mints—as in Australia (see para. 40). Thus, the *New York Commercial and Financial Chronicle* of 2nd January 1869 observed: "There is, however, a very considerable amount which arrives overland from the new gold territories of which

"there is no record. The mint returns show that since the opening of the mines "of Colorado and Montana (in 1862 and 1865) 30 millions (dollars) of gold from "those districts have been deposited in the United States mint and branches "in the Atlantic States, and that 35 millions from Idaho has been deposited "in these branches. It is well known among bullion dealers that *not one-* "*half the production* passes into the mint and Government assay office, a pre- "ference being given to private assays. It would, therefore, seem reasonable "to estimate that of this supply from unrecorded sources not less than 70 "millions of dollars have come overland from the new gold fields." And again, in 1871, the same journal, explaining certain statistics, stated: "The second "column shows the receipts of all kinds of gold and silver from California, "Oregon, Nevada, &c., as nearly as they can be ascertained. It is well known "that the whole bullion movement from the mining districts of California, "and the other western country, has changed since the opening of the *Pacific* "*Railroad:* previous to that event nearly the whole production was reported "at San Francisco, and was shipped thence by steamer to New York and other "ports; whereas, now, a very large proportion of the gold and silver obtained "from the mines comes direct to New York overland without going to San "Francisco. As no precise record of these movements is preserved, it is neces- "sary to make an approximation of them from the best information available:" but, necessarily, the official statistics do not include these overland shipments, from new mining districts connected by railway with New York, which do not pass through San Francisco.

9. The *Economist* believes that, inasmuch as the United States mints assay and stamp gold bars, the bulk of the gold production, even the portion for shipment abroad, must pass through the mints. The preceding extracts, and the following statistics of the coinage of the mints, show the error of this assumption, *viz.*,—

(4 Shillings = 1 Dollar.)

	1862.	1863.	1864.	1866.	1867.	1868.	1869.
	£	£	£	£	£	£	£
GOLD—							
Coins	9,106,477	4,139,170	4,329,869	5,662,789	5,643,438	3,622,885	4,365,727
Bars	3,228,838	389,976	466,681	1,823,097	2,324,338	1,205,362	2,039,866
TOTAL ...	12,335,315	4,529,146	4,796,550	7,485,886	7,967,776	4,828,247	6,405,593
SILVER—							
Coins	562,480	234,818	109,642	136,053	197,374	227,350	168,149
Bars	83,736	78,041	60,375	183,276	115,165	91,247	146,838
TOTAL ...	646,216	312,859	170,017	319,329	312,539	318,597	314,987
Copper	23,200	95,690	92,760	129,314	375,908	342,677	255,811
TOTAL ...	13,004,731	4,937,695	5,059,327	7,934,529	8,656,223	5,489,521	6,976,391

EXPORT FROM UNITED STATES.

GOLD—					
Gross export—					
Coin	(Information not available for these years.)	10,086,506	5,031,797	9,692,136	4,479,989
Bullion		4,152,865	2,773,528	4,787,133	2,720,711
Net export—					
Coin		8,692,654	2,021,153	8,301,555	1,831,661
Bullion		3,958,639	2,379,193	4,430,225	2,542,525

In the four years ended on 30th June 1869 the value of the gold bars assayed and stamped in the mints amounted to £7,393 millions, while the exports of gold bullion in the same period amounted to £14,434 millions gross and £13,310 millions net. These latter sums are exclusive of any exports inland to Canada, and of any accumulation of bullion in the country, and of amounts consumed in the arts.

10. Whether the estimate of the Commissioner of Mining Statistics be adopted or not, the gold of domestic production deposited in the United States mints is evidently much less than the actual production. This is additionally manifest from the following statistics of the annual production of California, which are given by the British Consul at San Francisco, in his report on the trade and State of California for 1871-72, *viz.*:—

Estimated production of California based upon the coinage of the mints, and on the Foreign exports, according to the Commerce and Navigation Reports.

	1	2	3	4	5	6	7	8
	Gold.	Silver.	⅓rd of Silver.	Total of Gold columns, 1+3.	Silver.	Total.	Gold of domestic production deposited in the Mints.	Total production of gold, per reports of Commissioner of Mining Statistics.
	£	£	£	£	£	£	£	£
1867	7·700	3·800	1·266	8·966	2·534	11·500	6·139	10·345
1868	7·000	3·000	1·000	8·000	2 000	10·000	4·341	9·600
1869	6·500	2·800	1·933	7·433	1·867	9·300	5·574	9·900
1870	6·000	3·200	1·066	7·066	2·134	9·200	5·179	10·000
1871	5·600	4·400	1·466	7·066	2·934	10·000	6·461	8·700
1872	6·960	5·110	1·703	8·663	3·407	12·070	2·466	7·200
	...	...	...	47·194	14·876	62·070	30·160	55·745

11. Mr. Phillips in his work on the Mining and Metallurgy of Gold and Silver states that "the gold obtained from the State of Nevada is now chiefly derived from the treatment of the auriferous silver ores of the great Comstock Vein, in which the gold usually represents about one-third of the total value of the precious metals contained in the rock." Owing to the predominant characteristic of the Nevada mines, their total production is returned under the head of silver, and it has been so entered in column 2 of the preceding table; but the Consul at San Francisco remarks: "About one-third of the value of the "silver production is also gold, which should be deducted from the second "column, and added to the first, to show the exact proportion of each metal "produced." This has been done in columns 3, 4 and 5 of the table.

12. It appears from the figures, as thus adjusted, that in the six years from 1867 to 1872, the total production of gold was £47·194 millions, while the amount of gold of domestic production deposited in the United States mints in that period was only £30,160 millions, showing an excess of production over deposits of 17 millions, or an average annual excess of 2⅚ millions over the sums assumed by the *Economist* as the total production. Next, it is observed that the total production of gold for the six years, as estimated by the Commissioner of Mining Statistics, amounted to £55·745 millions, against a production, as returned in the Consul's report, of £47·194 millions, giving an excess over the latter of £8·551 millions, or an average annual excess of £1·425 millions. This difference arises from the Consul having stuck to his text, which was California, and confined his statistics to the gold production

of California, while the Commissioner of Mining Statistics rightly includes the gold production of British Columbia and other parts, the coinage, and the export thereof, occurring through the United States: thus—

	Commissioner of Mining Statistics.			Consul's report.		Comptroller of the Currency.	
	1869.	1870.	1871.	1871.	1872.	1872.	
	Dollars.	Dollars.	Dollars.	£ (@ 4s. = 1 dollar.)	£	Dollars.	
GOLD—							
California ...	22·500	25·000	20·000	3·000	3·810	19·050	
Colorado and Wyoming ...	4·	3·775	4·763	·500	·600	3·002	
Oregon ...	3·	3·	2·500	·400	·381	1·905	
Idaho ...	7·	6·	5·	·500	·503	2·514	
Montana ...	9·	9·100	8·050	1·100	·888	4·442	
	45·500	46·875	40·313	5·500	6·182	30·913	
Utah ...	...	1·300	2·300	...	·704	3·520	
Arizona ...	1·000	·800	·800	...	·029	·144	
Washington ...	With Oregon.		With Oregon.	...	·045	·226	
	46·500	48·975	43·413	5·600	6·960	34·803	
British Columbia	...	...	...	...	...	1·350	Excess over Consul's report.
West Coast of Mexico ...	·500	·500	·500	...	...	·535	Excess over Consul's report.
	47·000	49·475	43·913	...	...	36·688	
SILVER—							
Nevada ...	14·000	16·000	22·500	4·200	5·110	25·549	
Other sources...	·500	·525	·250	·200	...	...	
GRAND TOTAL ...	61·500	66·000	66·663	10·000	12·070	62·237	

The Comptroller of Currency remarked that "the communication with Arizona "is so imperfect, that the figures set down for that territory may be entirely "omitted." The total production of gold, as reported by the Comptroller, is exclusive of the gold which now goes to New York from the gold fields in Upper California, without passing through San Francisco or through any of the mints, and it is exclusive—for 1872 at least—of one-third of the nominally silver produce of Nevada.

13. Adjusting the figures for 1871 and 1872 by adding one-third of the Nevada production entered under silver to the gold production, the figures become—

	£	Dollars.
1871—California, without British Columbia—		
Gold	7·066	
Silver	2·934	
	10·000	
1872—California, with British Columbia—		
Gold	9·041	45·204
Silver	3·407	17·033
	12·448	62·237

The figures for 1872 are taken from a report by the Comptroller of Currency which Mr. Pakenham, of the British Embassy at Washington, embodied in his report on the trade and commerce of the United States during the year 1872. Reviewing the figures, Mr. Pakenham observed: "After consideration the best "authorities assume that the year's product for the whole United States has been "about 55 (45 ?) millions of dollars in gold and 17 millions dollars in silver." For 1871 the British Consul's figures are exclusive of British Columbia and of Utah, the production of which latter, in 1872, amounted to £704,000. In his report for 1872 the Consul stated that the production of 1872 exceeded the gold production of the State of California in 1871 by fully £700,000: deducting this

sum from the total production in the United States for 1872, the remainder, £8·341 millions, would be the approximate total production in those States and in British Columbia and the West Coast of Mexico for 1871. The actuals of the Commissioner of Mining Statistics amount to £8·700 millions exclusive of one-third produce of Nevada. On the other hand the amounts entered in the table in paragraph 5, *viz.*, £7·200 millions, as the total gold production of the United States in the years 1872 and 1873, as estimated by the Commissioner, were evidently anticipatory or sketch estimates formed before the actual figures could be known; the ascertained production, as shown above, was £9·041 millions.

14. Accordingly, the tables taken from the *Economist* in paragraph 5 may, for the gold production of the United States, be corrected—1*st*, by substituting the figures of the Commissioner of Mining Statistics down to the year 1871 (though exclusive of Nevada) for the gold of domestic production deposited in the mints of the United States; 2*nd*, by substituting £ 9·041 millions of actuals for the Commissioner's sketch estimate for 1872, and by assuming 9 millions as the amount for 1873. In 1870 the amount was 10 millions, and as the Northern Pacific Railway, which now carries away a large quantity of unreported gold from Upper California, was extended to that territory in 1870, the figures for that year inclusive, as now settled, would still be incomplete by the amount of unreported exports of gold from California.

15. Not only, however, has the production of gold not declined in the United States, but there is prospect of an increase through the recent extension of hydraulic mining—great improvements in working quartz mines—and the working of new fields or mines. It will be convenient to preface the explanation on these heads by statistics of the production of the mines, so far as they are available here. Mr. Phillips, in the work already quoted, has furnished such statistics down to the year 1866, but they are incomplete, inasmuch as they show not the total production but the amount of gold deposited in the mints of the United States. The figures for 1871 and 1872 are from the Consular reports already quoted; those for 1871 are smaller than the amounts reported by the Commissioner of Mining Statistics (para. 12)—

	Annual average.		Deposited in the Mints.								Total production.	
	1848 to 1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1871.	1872.
	$	$	$	$	$	$	$	$	$	$	$	$
I.												
California	38·383	40·591	20·847	23·105	31·885	26·855	13·502	15·072	13·332	14·598	15·000	19·050
Oregon	..	·010	·006	·003	·003	·888	3·017	2·162	1·125	·915	2·000	1·905
Colorado	..	..	·004	·600	2·092	2 086	2·893	2·136	1·623	1·018	2 500	3·002
	38·383	40·601	26·857	23·708	33·980	29·779	19·412	19·317	16·080	16·531	19·500	23·957
II.												
Montana	..	..	..	..	..	..	..	..	1·768	5·505	5·500	4·442
Idaho	..	..	..	..	..	..	·002	2·806	4·972	3 892	2·500	2·514
Utah	..	..	..	·005	·074	..	..	..	..	..	..	3·521
Angona	..	..	..	·001	·020	..	·004	·004	·021	·030	·500	·144
	..	..	..	·006	·094	..	·006	2·810	6·761	8·927	8·500	10·621
Other places	..	..	..	..	..	..	·040	·007	·023	·004	..	·226
	..	..	..	·006	·094	..	·046	2·817	6·784	8·931	8·500	10·847
III.												
Gold refined	..	..	A	..	..	..	..	..	2·599	2·665	..	..
Gold parted from silver ..	..	..	..	..	..	1·132	1·145	·237	·240	·459	..	..
Nevada	—	..	..	..	..	·054	·011	·001	·007	·051	7·000	8·516
	..	..	..	..	..	1·186	1·156	·238	2·846	3·175	7·000	8·516
TOTAL ..	38·383	40·601	26 857	23·714	34·074	30·965	20·614	21·925	25·710	28 637	35·000	43·320

16. With the annual average from 1848 to 1857, and the amount for 1858, the accumulation of ages, in the surface diggings, was no doubt exhausted for the most part; and the sudden fall from 41 millions to 27 millions of dollars did not indicate a diminished productiveness of the mines which form the sources of permanent supply, and which, in fact, were hardly worked while alluvial washings on the surface were available. Mr. Phillips observes: "The sources "to which the chief annual supply of gold, in California, is referable, are the "following:—

"1*st*.—The distribution of the placer gold by the present river system, "giving rise to the *shallow diggings*.

"2*nd*.—The distribution of placer gold by ancient river systems, known "as *deep diggings*, worked, latterly, by hydraulic mining.

"3*rd*.—Auriferous veins most frequently enclosed in 'metamorphic "slates, worked by quartz mining."

At the date (1867) that Mr. Phillips wrote the supplies were obtained mostly from the first, and the remainder principally from the second source. He observed: "It is not, however, from the treatment of auriferous quartz that "the principal portion of the gold of commerce is procured,—a very large pro- "portion of it, probably two-thirds, being obtained from alluvial diggings in "which the gold is separated from the more or less superficial detritus by "washing. In some of these deposits nature has been for ages performing the "operations of crushing and concentrating on a vast scale, and has deposited "the precious metal in positions from which it can be obtained without a large "expenditure of either labor or capital. To this circumstance are attributable "the great variations which are observable in the production of gold throughout "the world—since, on the discovery of new and extensive alluvial diggings, an "almost unlimited supply of unskilled labor can at once be applied to its "extraction, whilst the same weight of metal, if retaining its original geolo- "gical position, could only be collected by the application of a large amount "of capital and skilled labor." In other words, the gold from alluvial washings, through which the production in gold fields, in the early years of their discovery, exceeded the subsequent annual supply from the parent rock, was the beneficient provision of nature for supplying the requisite capital (paragraph 6) for the sudden expansion of trade which always attends such discoveries, without trenching on the permanent provision in the new mines for the additional wear and tear of the metal, and for the further annual growth of the volume of trade which was created by the discovery.

17. Accordingly, passing by the period down to 1858, when the exceptional and beneficient provision of nature was being devoted to its special purpose, the progress of the supply of gold for the ordinary requirements of commerce need be traced only from the year 1859. So regarded, the table in paragraph 15 shows a remarkable progress, *viz*., from 27 millions dollars in 1859 to 43 millions in 1872. Some of the increase is no doubt nominal, inasmuch as the amount for 1872 represents nearly the whole production, while that for 1859 represents merely that part of the total production which passed through the mints of the United States. After allowing for this consideration, however, there is still a satisfactory increase. Section 3 of the table may be regarded as exhibiting the gold production of Nevada, the mines in which district were discovered in 1859; but the figures which show the deposits in the mint do not, as already observed, represent the total production of Nevada, which according to the *Economist*, for the years down to 1866, and according to the reports of the Consul at San Francisco, for later years, has been as follows:—

	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.
	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Gold ...	·016	·033	·758	2·167	4·166	5·333	5·600	5·500	6·466	5·000	4·667	5·333	7·333	8·517
Silver ...	·034	·067	1·517	4 333	8·333	10·667	11·200	11·000	12·934	10·000	9.333	10·667	14·667	17·033
Total ...	·050	·100	2·275	6·500	12·500	16·000	16·800	16·500	19·400	15·000	14·000	16·000	22·000	25·550

18. Taking California by itself, the yield (paragraph 15) from alluvial washings was maintained at the figure of 1859 down to 1862; in the following year the production fell to one-half; part of the decrease may be simply from a transfer of some entry to another section in the table; while 1872, compared with 1863, shows an increase of 5½ millions of dollars, or of forty per cent.—chiefly, it would appear, from the development of hydraulic mining in fields which (paragraph 16) form the second source of gold supply mentioned by Mr. Phillips. In this, as in the first source of supply, or the surface diggings, the deposit has "been principally derived from the degradation or breaking up of the auriferous veins, and the distribution of the detritus thus formed, chiefly by the agency "of running water. It further appears to be conclusively proved that this gold-"bearing drift is, at least, of two distinct geological epochs, both comparatively "modern, although the later period is distinctly separated from the earlier, and "its materials chiefly derived from the disintegration and redistribution of "the older placers. In California these (older placers) appear to be dis-"tinctly referable to a river system different from that which now exists "flowing at a higher level or over a less elevated continental mass, but some-"times in the direction of the main valleys of the present period" or river system. In these older placers the pay dirt, which, on being washed, yields gold, "is often formed at great depths from the surface, and is not unfre-"quently covered by thick beds of lava or volcanic ash. In the deeper placers "the auriferous drifts are reached either by shafts of considerable depth or "by means of levels or tunnels driven in from some neighbouring valley. * * "In other instances hydraulic mining is resorted to, in which case jets of "water, under great pressure obtained from a high column, are directed against "the superincumbent deposits of sand and gravel which are thus not only "disintegrated but finally carried away by the current. * * The pay dirt is "almost invariably covered by various layers of barren clay and sand, which are, "in the shallow diggings, removed by the use of pick and shovel; but in hydraulic "workings the whole is washed away by the force of a stream of water playing "against it, and any particles of gold which it may contain are caught in the "sluices through which the lighter materials pass." In this hydraulic mining operation "it is necessary to convey a copious supply of water to auriferous "deposits far above the level of the rivers in the vicinity, and often situated "at a great distance from the present streams in the country. This required the "expenditure of large sums of money for the construction of canals and aque-"ducts, by which it was brought from springs and reservoirs at elevations such "as to command the largest and most important diggings. The demand for "the association of labor and capital soon called into existence numerous canal "and ditch companies, the shareholders being for the most part miners, whose "limited resources generally obliged them to borrow money from the local bankers "at rates of interest varying from three to four per cent. per month. ** "Among the most remarkable objects that strike the traveller on first visiting "the mining regions in California, are the lofty aqueducts constructed of trestle "work, for the purpose of conveying water across deep valleys and ravines. ** "From each of these nozzles streams of water are directed against the face of "the gravel to be washed, with a force which can only be compared with that "of ordnance."

19. The principal rivers in California are fed from the melting of the snows on the Sierra Nevada; and the water from this source secures the perennial or minimum gold supply of California; the rains provide additional supplies of water, and hence drought causes the fluctuations in the annual gold production of California. Mr. Phillips wrote in 1868: "Water is the great agent "by the aid of which placer mining is carried on: with a large supply the opera-"tions of the miner can be cheaply and rapidly conducted; but without water, or "with only a limited amount, a claim that would otherwise have been highly pro-"ductive, may either become valueless, or only capable of affording very irregular "returns." The British Consul at San Francisco in his report for 1871 wrote: "The year 1871 proved a second year of drought** but this year (1872) com-"mences most prosperously: we have already had more than an average fall of "rain, which will not only secure to us a crop of grain far in excess of that of any

"previous year, but it will enable the mines, upon which so much capital has "been invested, in bringing them into condition for thorough development, to "be worked to their fullest capacity. At no time since the early days of "placer mining has there been so brilliant a future for the mining interests: "the business is now very perfectly understood in all its varied branches, and "the yield of our quartz mines and old river channels will annually "increase.* * The short supply of water the past year (1871) has "interfered materially with mining operations both in California and "Nevada; many of the quartz mills in this State have been idle for many "months, and hydraulic mining has had to be suspended altogether, in many "localities, both from want of water for hydraulic use, and from the accumula- "tion of the tailings. Every year new capital is brought to bear on mining "enterprise and it is no longer difficult to find the requisite means to work a "mine, if the prospects are at all encouraging. During the past year, notwith- "standing the limited supply of water, there have been more enterprises "started, or increased in magnitude, than in any previous year. Hydraulic "mining is the most attractive, and as the courses of the old river channels "are more surely traced, this description will be enormously extended. It is "becoming more general throughout the mining districts. * * The great "hindrance to the working of these mines has generally been the want of drainage "capacity, and which has compelled the construction of long and expensive "tunnels—a work of great labor and time. The large ditches, now furnishing "water for hydraulic purposes, supply hydraulic power from nozzles of 7 inches "in diameter and the force is terrific. Two or three years ago a 3-inch nozzle "was in use."

20. Continuing the subject in the report for 1872, the Consul wrote: "The past year has been one of unparalleled prosperity: the rains of last season, "though not much more than an average quantity, were well distributed "throughout the season, causing a yield of wheat far beyond that of any pre- "vious year, whilst the gold production of the State exceeded that of 1871 by "fully £700,000. * * This success is to be attributed to the more than "usual supply of water—the increase in the arrangements for storing and bring- "ing it by canals and ditches to the points required, and to the completion of "tunnels to provide an outlet for the enormous hydraulic washings. Many of "these tunnels have been the work of years, and each year henceforth will "witness the completion of others, permitting of a vast increase of this de- "scription of mining. The area of these auriferous grounds, adapted to "hydraulic mining, is enormous, extending through almost the whole of the "northern mining districts, and there is little doubt they will be found "through a considerable portion of the southern. The State Geological "Survey, with Professor Whitney at its head, have traced the ancient river beds "through portions of the countries of Yuba, Nevada, Placer, Sacramento and "San Joaquin, but their labors, the first year, have been curtailed for want of "funds. The objects of their survey as described by one of the local papers "are—1*st*, to ascertain the definite location, and the approximate extent and "magnitude, of the masses of auriferous gravel, and to acquire such reliable "information as can be obtained respecting their past and present yield; "2*nd*, to lay down the gravel upon a map, on a scale of two miles to one inch, "and thus exhibit clearly to the eye its situation and extent, showing, by "different colors, the localities where its surfaces are uncovered, and where the "mass can be worked by hydraulic power, and the localities where it is deeply "buried beneath heavy masses of volcanic matter, and can only be worked by "tunnelling and drifting, &c., &c."

21. Of the third source of supply (paragraph 14) *viz.*, quartz mines, in which gold as met with in its original gangue or matrix, is extracted from the vein by the ordinary operations of mining, and is crushed by mechanical means to a fine powder, from which the gold is obtained either by washing or amalgamation, Mr. Phillips wrote: "It is however generally observed that the widest veins are "not usually the richest. It was formerly believed that veins of auriferous "quartz become gradually less productive, as greater depths from the surface "are attained; but more extensive experience would tend to show that this is "really not the case. Gold mines which have for many years been continu- "ously worked in various parts of the world have fluctuated considerably in

"their richness at different depths, but it has not been found that these "variations in any way correspond with a gradual improvement in the deeper "levels." Sir R. Murchison inclined to the opinion that gold bearing veins generally diminish in value as they descend in depth; but in a letter to him, Mr. Selwyn, the Geologist of the Australian Government, wrote: "There is undoubtedly good evidence that those upper portions of the "quartz veins which have been naturally removed by denudation, and now "form the gold drifts, were often far richer than any we now find at the "surface; but in drawing conclusions from this evidence, we should not "forget that in all probability many hundreds of vertical feet of quartz veins "have been thus naturally broken up, crushed, and washed, and the fact "of the veins, so abraded, being frequently very rich on their present surface, "goes far, I think, to prove that the diminution of yield in depth, even "though admitted to be true, on an extensive scale, is still so slow as not to "be appreciable within any depth to which ordinary mining operations are "carried." * *

22. In California (continued Mr. Phillips) "the early quartz miners "were also fully impressed with the idea that the outcrops of the leads were "more productive of gold than the deeper portions of the same veins, and as "soon as the quartz extracted ceased to afford a remunerative return, they usually "suspended operations, without extending their explorations to any considerable "depth. Within the last five years, however, their opinions in this respect "have become materially changed, since the workings of the deeper mines "would lead to the conclusion, that, although leads of gold-bearing quartz, "like all other metalliferous veins, vary materially in their yield in different "portions of their extent, both in length and depth, there is no evidence "to indicate a progressive falling off in their yield in the deeper workings. The "North Star Allison Branch, and Eureka veins in Grass valley, will, among "many others that might be selected, serve to illustrate the fact, that the "Californian mines do not become sensibly impoverished in depth, as, in common "with all mines of this district, they are at the present time quite as productive "as they have ever been at any period since the commencement of opera-"tions. * * Another reason of the former prevalence of the impression "that the yield of gold diminished, as a greater depth of the mine was reached, "may be traced to the fact that gold is almost universally associated with a "greater or less amount of iron pyrites and other sulphides, and these, "becoming oxidized at shallow depths, liberate the enclosed gold, which is "thus readily collected by amalgamation, although the deeper, and conse-"quently less decomposed portions of the vein, which may in reality have been "equally auriferous, afforded to the early miners less satisfactory results. "With the improved methods of treatment, however, which have now come "into general operation, this difficulty has to a great extent disappeared; "and as all the auriferous sulphides are being at the present time carefully "collected for subsequent elaboration, the average production of a vein has "generally been found to be sustained at all depths to which the miner has "hitherto penetrated." Evidence to the same effect will be given in the sequel (paragraph 34) in speaking of the gold production of Australia.

23. In his report for the year 1871, the British Consul at San Francisco wrote:—"A great many very fine quartz mills have been built with all the "improvements which science and practical experience have taught; and "though labor has not sensibly depreciated in value, quartz of a much lower "grade can be profitably worked than heretofore. The two leading quartz "mines of California, the Amadar in Amadar country, and the Eureka in "Nevada country have paid in dividends, respectively, £172,000 (since it has "been an incorporated company) and £354,800." The *New York Commercial Chronicle* reviewing progress for the same year wrote: "Within 1871, "mining operations have taken a fresh start, and a return of further confidence "in that description of property has led to a largely increased investment both "at home and abroad. Everywhere new ore-crushing mills have been erected, "some of them of large capacity;—improved furnaces have been built for "roasting the rebellious ores; a great number of smelting works have been "erected in the base metal districts; and with the new system of ditches and

" reservoirs, the available water-supply has been increased fully twenty per cent. " With all these auxiliaries and the development of many new and productive " mining districts, the outlook is full of promise. The profits also, in 1871, " have been exceptionally large; some old mines have renewed the payment " of dividends, after being for several years sustained by assessments:—others, " which had never returned a profit, have begun to yield 'pay ores' and, in " certain instances to render large returns, while among the new mines, " many have paid from the beginning."

24. The British Consul at San Francisco, in his report for 1872, wrote: " The quartz mines have attracted a full share of attention, and the yield from " them has been quite equal to the average of the past few years. The last " report of the Surveyor General gives the number of quartz mills in the state " at 311, and the number of tons of quartz crushed at 572,913; this is not " very reliable information, but it is the only statistical data that exists. A " great many mines which had been closed for years have been opened, and " it is believed will give a good return under the various economies now prac- " tised, and the superior machinery employed in the mills."

25. These extracts show the recently increased productiveness, compared with 1863, of hydraulic and quartz mining in the old districts of 1863, as well as in territories more recently worked. The additions, since 1863, from the discovery and working of gold in new districts, are shown in the II section of the table in paragraph 15. Respecting these Mr. Phillips wrote in 1867: " In Eastern " Oregon, Washington territory, Idaha, and Montana, large auriferous districts " have been recently discovered, every year adding to their extent, in pro- " portion as these little known regions become more widely explored. * * " A certain amount of gold is annually produced by the territory of Utah, but " the quantity is believed to be small. (The Mormons, when Mr. Phillips wrote, had concealed the richness of the gold supply). The same may be said of " Arizona, although, judging from the reports of miners and others who have " visited these regions, it would appear that the limited nature of the returns " is rather a result of the small number of miners, than from any deficiency in " the richness of the auriferous deposits which have been discovered."

26. The Consul at San Francisco in his report for 1871 stated: " Ex- " traordinary developments have been made in the great 'Comstock lode' of " Nevada, and the yield has reached £2,200,000, fully one-third more than " the product of 1870. The more recent discoveries have been in the 'Crown " Point' and 'Belchar' mines which have proved so flattering as to send the " value of their stock far above what it has ever before reached."

27. Summing up this account of the production of gold in the United States, it appears—1*st*, that, for the figures assumed by the *Economist*, which represent merely the amounts of gold of domestic production deposited in the mints of the United States, there should be substituted, down to 1871, the amounts of total production in the United States, which are given by the Commissioner of Mining Statistics; 2*ndly*, that for the Commissioner's sketch estimate of the production in 1872 and 1873, *viz.*, 7½ milions sterling in each year, there should be substituted 9·041 millions, and 9 millions a year, respectively; 3*rdly*, that 1870 and 1871 were years of drought in which the production of gold was checked; that since 1870, owing to the extension of the Northern Pacific Railway to mining districts from which gold now passes to New York, without being reported to the authorities, the official reports (even as corrected in this paragraph) do not show the whole production, and that, nevertheless, they do show a production which does not indicate any falling off; 4*thly*, that whereas, in earlier years, a high rate of interest, *viz.*, four or five per cent. a month (paragraph 18), prevented free recourse to hydraulic mining, capital is now freely invested in mining enterprise in California, and hydraulic mining has been very greatly extended, but so very recently, that there had not been time, at date of the last reports, for its full effect on the total production, and yet, with such encouraging results, as to place beyond doubt further extensions over immense auriferous tracts which are suited for hydraulic mining; 5*thly*, that the yield from the veins of auriferous quartz does not diminish with the increasing depth at which a mine may be worked, while the machinery and appliances for quartz mining have

been greatly improved, and the cost of working per ton of quartz has thereby been so greatly reduced as to admit of the re-opening of old mines and the working of new veins; 6*thly*, that the supply of water has been increased fully twenty per cent.; 7*thly*, that on all these considerations it may be affirmed that the production of gold in California, far from having diminished, is on the increase.

28. The annual average production of gold in Australia, in the years which are grouped in the table in paragraph 5, is given in the abstract at foot of that table. It shows such a steady annual production, in the aggregate, of 11½ to above 12 millions sterling a year from 1852 to 1869, as to warrant a strong presumption that the sudden decline* of supposed production to 9·457 millions in 1870, 8·855 millions in 1871, and 7·976 millions in 1872, was apparent only. The explanation is—

1*stly*.—That the figures in the table, as taken from the *Economist*, represent, down to 1871, the total net exports of gold from Australia, according to the trade returns of the Colonies, *plus* the coinage in the Sydney and Melbourne mints; but, from 1872 to 1874, the net imports of gold into the United Kingdom from Australia were given instead of the net exports from Australia to all parts of the world. It was shown in the *Economist* of 3rd August 1872 that from 1866 to 1871 the net exports of gold from Australia to the United Kingdom per colonial returns exceeded the net imports thence into the United Kingdom, per Board of Trade returns, by £15·733 millions, or an annual average of £2·622 millions with an excess in 1871 of £2·601 millions, and that the annual excess in previous years ranged from 3·016 millions in 1860 to 6·368 in 1865, and 4·483 millions in 1866. The amount of gold imported into British India from Australia in 1872-73 was £366,473, and the greater part, if not the whole, of the similar importation from Ceylon into India, *viz.*, £235,665, was probably from Australia. Altogether 1 million sterling might be added to the *Economist's* figures for 1872 to raise the amount of net import into the United Kingdom in 1872 to the amount of net export from Australia in that year.

2*ndly*.—At the end of 1869 the amount of coin and bullion in the banks in Australia amounted to £5·540 millions, while at the end of 1872 it amounted to 9·010 millions (*Statistical Journal*, March 1874, pages 62-5). The increase of £3·470 millions represents a new production of gold which had not been exported from Australia, and which should apparently be added to the *Economist's* figures. The annual production for the three years from 1870 to 1872, as assumed by the *Economist*, amounts to £26·288 millions. Increasing this sum by the two items above-mentioned, or by £4·470 millions, the aggregate becomes £30·758 millions, giving an annual average of 10·253 millions, or a sum which does not indicate any decrease of production to the end of 1872.

29. Or, bringing the calculation down to the end of 1873, the *Economist's* figures from 1870 to 1873, inclusive, amount to £38·054 millions, and the sums short stated therein, for the exports from Australia, for 1872 and 1873, are 1 million and £·8 million, while the gold and specie in the banks in Australia in the beginning of 1874 amounted to £7·800 millions, against £5,540 millions at the end of 1869, showing an increase of £2·260 millions, and making, with the other two items aggregating £1·8 millions, a total of £4·060 millions which have to be added to the *Economist's* £38·054 millions. The grand total for the four years becomes £42·104 millions, which gives an average annual production of £10·528 millions for the four years ended 31st December 1873. Accordingly, there has been a steady annual production of 11½ to about 12 millions from 1852 to the end of 1873.

* The figures quoted here are less than the totals of the *Economist*, as shewn in the table in paragraph 5, because £8·287 for 1870 and £7·605 millions for 1871, have been substituted as the correct next exports from Australia in those years, for the larger estimated amounts which had been assumed by the *Economist*.

30. Though, however, the total production has been remarkably uniform since the discovery of gold in Australia, yet there has been a decline in the old districts of New South Wales and Victoria, which has been compensated by discoveries of new mines in New Zealand and Queensland, the net exports for the several Colonies having been—

	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867	1868.	1869.	1870.	1871.
NET EXPORTS.	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
New South Wales ..	·769	1·267	1·459	1·405	1·767	2·437	1·863	1·216	1·272	1·112	·781	·398	9·29	·903	·047
Victoria ..	11 520	10·102	10·179	8·906	8·529	6·655	7·136	6·259	6·249	5·744	5·329	6·198	5·789	4·710	4·434
	12·289	11·369	11·638	10·311	10·296	9·092	8·999	7·475	7·521	6·856	6 110	6·596	7·718	5·613	4·481
New Zealand ..	—·005	·020	·022	—·057	·671	1·360	2·527	1·724	1·976	2·784	2·694	2·171	2 206	2·062	2·609
Queensland ..	..	..	..	·006	—·002	..	·009	·041	·048	—·029	·063	·604	·522	·483	·584
	12·284	11·389	11·660	10·260	10·965	10·452	11·535	9·240	9·545	9·611	8 867	9·371	10·446	8·158	7·674
NET IMPORTS.															
Other Colonies ..	·040	—·030	·019	·073	·050	—·001	·066	·216	·012	—·007	·083	·020	·063	—·079	·069
	12·244	11·419	11·641	10·187	10·915	10·453	11·469	9·024	9·533	9·618	8·784	9 351	10·383	8·237	7·605

These figures are exclusive of the coinage in the Sydney and Melbourne mints. New Zealand from 1866, and Queensland from 1867, have supplied from $2\frac{3}{4}$ to 3 millions sterling as a set-off to the diminished production of New South Wales and Victoria, so far as that is represented by the bare net exports from those Colonies. In Queensland the production had reached £840,000 a year in 1873, and a late *Pall Mall Budget* stated that thousands of organised Chinese emigrants are flocking to the gold mines in Queensland. For New South Wales the total production is available in another form, *viz.*:—

	Oz.	£		Oz.	£
1863 ...	423,407	1,629,049	1869 ...	224,382	866,749
1864 ...	316,429	1,211,169	1870 ...	198,664	763,655
1865 ...	280,810	1,077,905	1871 ...	296,928	1,143,781
1866 ...	241,489	928,275	1872 ...	392,186	1,513,186
1867 ...	222,715	863,794	1873 ...	328,196	1,265,196
1868 ...	229,739	894,829			

The yield in the earlier years was mainly from alluvial washings;—it declined from 1863 to 1870, after which it increased considerably. In a paper on Australasian banking, read on 17th March 1874 before the Statistical Society, Mr. Cork stated that "mines, rich beyond all previous experience, have within "the last two years been opened up in New South Wales. But it has been to "the attention to quartz mining, and to the great recent improvements in the "crushing machinery, that the increased product of 1872-73 has mainly been "owing. Scarcely any quartz leases had been taken out in New South Wales "before 1872, and since then we have constantly met with fabulous accounts "of the results."

31. It may be explained here that owing to deficient water-supply hydraulic mining is hardly practised in Australia as in California; and that, hence, as the alluvial washings were becoming exhausted, there was necessarily diminished production during the gradual investment of capital in quartz mines, and the gradual progress in the transfer of labor from alluvial to quartz mines. In New Zealand, however, there is scope for hydraulic mining.

32. These causes of diminished yield in the old diggings, and latterly of renewed production through the improvement and extension of quartz mining,

have been markedly exhibited in Victoria. The number of gold miners and their average earnings in that colony have been as follows:—

	Average number.	Average earnings. £ s. d.		Average number.	Average earnings. £ s. d.
1859 ...	125,769	.....	1867 ...	65,857	87 1 7
1860 ...	108,562	79 9 3	1868 ...	63,181	104 18 8
1861 ...	100,463	74 15 11	1869 ...	68,037	80 8 0
1862 ...	93,779	67 17 10	1870 ...	60,367	84 18 0
1863 ...	92,994	70 9 2	1871 ...	58,279	89 14 0
1864 ...	84,986	74 1 9	1872 ...	52,965	96 8 0
1865 ...	79,457	74 4 2	1873 ...	*50,595	
1866 ...	73,479	80 8 3			

The average earnings are those struck on the total earnings of quartz and alluvial miners; for the latter the average earnings in 1867 were £ 67-10-7½, and of quartz miners, £ 158-11-8¾; the decrease in miners has been chiefly among the alluvial miners, many of whom forsook the gold fields for employment on the extensive public works which have been in progress from 1865, and possibly from an earlier date. Another considerable number withdrew when, from the constant working of the alluvial deposits, there were fewer lottery tickets, in the form of nuggets, to render the mines attractive.

33. If the yield from alluvial deposits has declined, important kinds of compensation are afforded in the quartz mines. Mr. Phillips, writing in 1867, observed: "When, as at first, the cost of crushing and amalgamating a ton "of quartz amounted to some 80 shillings, a very small proportion of the "auriferous vein of the Colony (Victoria) could be treated with advantage; "but now that the total expense of raising and treating a ton of rock by steam "power has, under favorable circumstances, been reduced to about 16*s.* 4*d.*, there "are numerous reefs throughout the gold mining region, affording satisfactory "results, and many others that would do the same if extensively and judiciously "worked." In March 1874, Mr. Cork, referring to "the great recent improve-"ments in the crushing machinery" (paragraph 30), observed: "The advantage "of quartz over alluvial mining is being remarkably illustrated also in Victoria. "From the gold mining returns of that Colony for the quarter ending 30th June "1873, we find that while 35,806 alluvial miners obtained only 123,643 oz. of "gold, 17,079 quartz miners obtained 159,604 oz.," equal to £36 each man, for the quarter, or £144 per annum, or nearly the same amount of earnings (£158) as in 1867 (paragraph 32). In the Commercial History and Review of 1873, the *Economist* observed that "quartz crushing in Australia is now an established "and scientific method of gold mining."

34. The steadiness of the yield from quartz in Victoria is another advantage. Mr. Phillips wrote in 1867: "Generally speaking, also, "the yield of the quartz veins of Victoria has not been found to decrease in "depth, and those which have been wrought below 500 feet from the surface have "experienced no diminution in the produce. In spite of all its disadvantages, "and its requiring a considerable amount of capital, quartz mining has been "found a highly remunerative occupation, and from the productiveness and "extent of its reefs, it is certain that Victoria presents an attractive field "for the investment of capital in this department of industry." The *Melbourne Argus* of 6th November 1871, observed: "It is almost needless now to "mention the immense value of some of the quartz reefs in the Sandhurst "district. Many of them have returned splendid yields of gold for years "past, and still seem inexhaustible. Some of them have been worked from "the surface to a *depth of over* 700 *feet*, the reef being taken out all the "way down, yet the stone extracted is as rich as ever. *It is now considered "that there is scarcely any limit to the depth* at which quartz reefs *may be "considered payable*, and it is not unfrequently stated that they may be "worked down to 2,000 feet, with results quite equal to those obtained "nearer the surface of the earth."

35. This inexhaustible treasure in the reefs now in work precludes fear that the production of gold in Victoria is falling off from a growing lack of the precious metal, and secondly, it warrants a conclusion that every new reef

* 31st December 1873.

which is discovered will not so much correct a deficiency caused by some other exhausted reef, as add to existing supplies. The extension of quartz mining in Victoria may accordingly be noted, as follows:—

I.—In November 1871, the *Melbourne Argus* wrote:—"Extensive improvements have taken place in the *quartz mines* at Sandhurst, many new discoveries have been made in that district during the last two years. A great many companies have also been started to work *newly discovered reefs* on ground in which auriferous reefs are supposed to exist: indeed companies have multiplied at such a rate that it is almost an impossibility for any one not thoroughly conversant with the whole of the new Sandhurst district to remember one-half of their names. Though many ventures will of course not get beyond the initiatory stage a fair proportion of them will be proceeded with, to the great benefit of the district. So much work is now being done in the district that many companies are at a standstill, through want of miners, though £2-10 per week, per man, is offered.

II.—"The great improvement which has arisen from quartz mining in the Sandhurst district has brought into prominence the claims of Castlemaine, which district has long been considered by many persons acquainted with it to be as rich in reefs as Sandhurst is; and it is said that had the same amount of energy and capital been expended in and around Castlemaine as has been devoted to the Sandhurst mines, the former would, at this moment, have been furnishing yields equal to those returned by the latter. * * The great interest now being evinced in quartz mining has led to the formation of companies to work mines in this district (which have hitherto languished for want of capital) in an extensive manner, with the latest improvements.

III.—"It would appear from the discoveries of new auriferous ground which are made from time to time in Victoria that nearly the whole colony is auriferous, and that gold will be extracted from it for all time to come. Only recently, a payable gold field was found at Stock-yard Creek, near Port Albert, in the most south-eastern portion of the colony, far from the region of what had hitherto been termed gold country; and, now, reports come to hand of the discovery of gold quartz reefs in the south-western portion of Victoria at some distance beyond the existing western gold fields."

IV.—The same journal, resuming the story on 5th November 1873, wrote: "For seven years past there has been a constant diminution of the number of miners actually at work, and yet, instead of a large reduction in the yield of gold, there has been no decrease, so far at least as the last two or three years were concerned; the average yields for each individual miner having been so much more than formerly, that they have kept up the total returns to an amount equal to what was obtained from a greater number of miners several years ago. The increased yield per miner is due to the great development of *quartz mining*, by the successive discovery, for a long time past, of new quartz reefs, and the improvements and extensions which have been added to the machinery employed for crushing and extracting gold from quartz stone.

V.—"The quartz mining industry has now indeed attained to such dimensions that the returns from it exceed those from alluvial mining, which was the original and until recently the principal mode of obtaining gold. Scarcely a month ever passes by without a new discovery of a gold bearing quartz

" reef, either in a well known quartz district, or, in a district " where, previously, quartz mining, if followed at all, was only " carried on tentatively. *Sandhurst* especially has been very " remarkable for the great strides made there in quartz " mining, during the last three or four years, and it has been " mainly through the reefs which appear to run in and " around the city of *Sandhurst* itself, that the yield of gold " has been kept up, notwithstanding the falling off in the " numbers of miners. * * It is now the almost universal " opinion that the riches of *Sandhurst* are comparatively in- " exhaustible.

VI.—"The accounts from *Stawell*, the quartz mining district which is " second in importance in the colony, are also encouraging, as " from time to time new reefs are found, each of which shows " the richness of the country thereabouts in quartz gold. It " is now considered by many that *Stawell* will, in the long " run, be quite as good a quartz district as *Sandhurst*.

VII.—"In Ballarat itself, which has been perhaps the richest alluvial " mining district in the world, attention is now being constantly " directed to quartz mining in some instances with success, and " it is hoped and believed that Ballarat will yet be a quartz " mining town."

VIII.—In illustration of the remark in IV, the following statistics, which however cannot be regarded as complete, are supplied in millions of ounces:—

	1866.	1867.	1868.	1869.	1870.	1871.	1872.
No. of miners ...	78,479	65,857	63,181	68,037	60,367	58,101	54,651
Ounces produced ...	1,537	1,494	1,474	1,368	1,282	1,303	1,317

36. Of New Zealand, it was observed in 1869 that " the immense wealth of the Thames gold fields, in the northern island of New Zealand, has given a great stimulus to gold prospecting in other districts of the colony." In Queensland gold was discovered in 1867, and the production has increased as follows:—

	1868.	1869.	1870.	1871.	1872.
Ounces ...	122,712	130,944	100,634	151,544	178,308
£ ...	429,907	451,352	351,412	504,876	592,993

37. Summing up this account of the production of gold in Australasia, it appears—1*st*, that the *Economist's* statement of that production for the years 1871 to 1873 has to be altered to an annual average of 10·528 millions a year; 2*nd*, that the production has been uniformly maintained from 1852 to 1873 at 11½ millions to above 12 millions sterling a year, notwithstanding the diminished yield, which had to be expected, from alluvial deposits; 3*rd*, that among the new sources of supply, the production in Queensland has been steadily increasing since the discovery of gold in that colony in 1867, while there is promise, in New Zealand, of the opening of new mines as an addition to the yield from the rich gold fields which are now worked in that colony; 4*th*, that in Victoria quartz mining has become an established industry, and that both in that colony and in New South Wales the production of late years has increased, and has entered on a new phase, from the great improvements in the machinery for crushing quartz and extracting gold, from the constant discovery (more especially in Victoria) of new quartz reefs, while the yield from the old reefs does not diminish with the increased depth to which they are worked, and from the abundance of capital which is now freely invested in gold mining enterprise; 5*th*, it may be added, from the paper read by Mr. Cork, in March 1874, before the Statistical Society, that "gold has been discovered in the northern territory of South Australia and in Tasmania, and mines rich beyond all previous experience, have within the last two years been opened up in New South Wales;" 6*th*, so far from a diminished yield, these considerations justify the expectation of an increased production of gold in Australasia.

38. The reason why, with a full production of gold, its export to the United Kingdom has diminished of late years, is that the balance of trade, always adverse to Australia, has latterly decreased, from the greatly augmented exports of wool, and its much dearer price in Europe and the United States. The imports and exports from Australia and New Zealand to the United Kingdom have been as follow :—

Trade with the United Kingdom.

	Merchandise.			Merchandise.	
	Imports.	Exports.		Imports.	Exports.
	£	£		£	£
1857	27·095	11·504	1865 ...	32·452	20·865
1858	24·649	9·956	1866 ...	32·234	21·516
1859	26·023	1·489	1867 ...	25·784	21·794
1860	26·856	11·796	1868 ...	27·208	23·905
1861	25·508	13·621	1869 ...	29·472	21·021
1862	29·864	16·088	1870 ...	25·753	20·184
1863	33·057	16·909	1871 ...	24·939	26·976
1864	34·142	22·033			

These figures are from the colonial returns. For the subsequent period, according to the Board of Trade's returns, there was a net import from Australia into the United Kingdom, in 1872, of £143,000 and a net export from the latter to Australia of £ 1·963 million in 1873, and 2·281 millions in 1874.

39. Were the balance of trade not adverse to Australia, gold would still, of course, be exported thence for investment abroad, to the extent of annual savings, but the exportation would in other respects depend on the margin of difference between the price realisable in London, and the lesser price allowed for the gold by local banks, to producers, *plus* insurance charges of transmission to London, and loss of interest till arrival there. Mr. Cork, in the paper already quoted, adds other items to the credit of the United Kingdom *viz.*:—

1*st.*—"The Colonists are very great tea-drinkers, and in 1871 we (London) "paid to India and the East, on Australasian account, 3,280,000*l.* "for tea and sugar. Other articles, such as rice, spices, and the "class of goods known as 'Yankee Notions' are also imported "direct and are paid for in London, probably to the amount of "1,000,000*l.* annually, total £4·280 millions.

2*nd.*—"Freight on British carrying trade to Australasia £1·203 millions.

3*rd.*—"Remittances to absentees; there are many such, some of them "men of enormous wealth; probably much of the income of "the absentees is retained in the colonies for reinvestment, "but the amount drawn cannot be less than 3 millions sterling "annually.

4*th.*—"Interest, say, at 6 per cent. on the amount of British capital "invested in Australasia,—£4·200 millions:—total 12·683 "millions."

40. Of the vast increase of wealth, and of local accumulations of capital from the augmented exports and the production of gold, there are the following instances; the first three of which are cited from Mr. Cork's paper, and the fourth from the *Economist*;—

1*st.*—"In the course of 1872, Australian capital accumulated in London "to the amount of some millions, and the value of money being "higher in London than in the colonies, the banks had no "inducement to draw their balances."

2*nd.*—"Owing to the fall in the value of money in the colonies, there "has been no inducement to remit capital thither for invest- "ment; indeed, the tendency has been strongly in the other "direction, *viz.*, to withdraw money, because profitable mort- "gages, &c., could no longer be found. It is not that great "loans have been raised in England for the construction of "railways; on the contrary, all recent Government loans have "been contracted for in the colonies at lower rates than they

"would probably have been in the London market, while, at the "same time, the former loans, the bonds of which are held "here (London) have been, and are being, steadily paid off "by periodical drawings." * *

3rd.—"To those at all acquainted with Australia, I need not point out "the numberless other evidences of this increase of wealth. "At the commencement of 1870, the 5 per cent. Colonial Gov- "ernment debentures stood at par: on the 6th October 1873, "at Sydney, the same bonds, apart from interest accrued, "were quoted 108¼-¾, being 2½ per cent. higher than in London "at same date."**

4th.—"During 1872, there has been great abundance of money in the "Australian colonies, and a low rate of interest, a phenomenon "hitherto unknown in so new a country. All the Australian "banks in London have been full of money. In February "1873 the banks in Australia reduced their rate of discount "to 3 per cent., owing to the abundance and cheapness of "money throughout Australia. In the report lately issued by "the English, Scotch and Australian Chartered Bank, it is "noticed that though the business of the Bank was flourishing, "the profit was less than it would otherwise be owing to the "great abundance of money and consequently low rates "charged for it in the Australian Colonies. We understand, "too, that for a long time it has been noticed in Lombard Street "that the balances of the banks having an Australian business "are unusually large. * * The Australian Colonies are no "longer countries of large immigration, in which the demand "for capital is apt to exceed the supply, but are practically in "the economic condition of old countries, where capital accu- "mulates rapidly, and chokes up the channels for its employ- "ment, Australia, with its gold mines and huge sheep farms, "is a country where the industrial organisation to a large "extent resembles that of a manufacturing country like "England,—capital being in comparatively few hands, and the "proportion of laborers to the gross produce being small. "The profits of a good season consequently produce, as in "England, a great plethora of money which is not absorbed, "as is ordinarily the case in a new country, by the demands of "a vast immigration."

41. With these evidences of immense wealth rapidly accumulating in Australasia, it is probable that the net exports thence of gold, plus the coinage of the local mints, do not, even after adjusting the *Economist's* figures in the manner already stated, represent the whole of the annual production of gold, for the customs returns do not, it is almost certain, show all the gold which is exported by the Banks. Mr. Cork observes: "The establishment of the "Sydney mint saved the necessity of the Australian importation of gold "coin; and specie is now sent home when the banks find they have no "other means of remitting. It is otherwise with bar gold; as all the "Melbourne banks and the bank of New South Wales in Sydney have "their own smelting establishments, they send their produce to the best "market. To the colonial mints they would have to pay three pence "per ounce coinage; that charge is not incurred in London." Again: "A second cause of the recent growth of wealth in Australasia has been "the increased production of gold. There is no means of arriving at the "exact value of gold obtained from the mines, as it is quite optional with the "miner, whether he send his gold to the Sydney or Melbourne mints, or to "the banks. There are, however, various means by which an approximately "correct estimate of the total production may be ascertained." These, according to Mr. Cork's enumeration, are the importations of gold into the United Kingdom (manifestly defective, paras. 28 and 119) and the increase of coin and bullion in the local banks and in the Government treasuries.

42. The bullion, purchased by the banks, which does not pass through the local mints, is eventually exported; but the prevalent belief, more than once expressed in the *Economist*, that bullion shipped is not always reported

at its full value has been confirmed by facts; and hence there is a strong probability that, with the evidences of a rapid accumulation of immense wealth in Australasia, the total gold production is not fully represented in the preceding figures, as adjusted from the tables published in the *Economist*.

43. For Russia (paragraph 5), the *Economist* shews an increase of annual production of gold of late years, from about 3 millions sterling in 1853 to 1857, and 3¼ millions in 1858 to 1867, to 4½ millions in 1872 to 1874. Subsequently, on 27th March 1875, the *Economist* quoted a report which gave the actual production for 1874 as £4,054,750, against an actual in 1872 of £4,771,000; but in citing the report that journal saw no reason to alter its statement of 4½ millions as being the approximate average annual production for the years 1872 to 1874.

44. Counting the amount of total production of gold, it appears:—

1*st*.—That, for the United States, the amount of total production stated by the Commissioner of Mining Statistics may be taken, but with sums of 9·041 and 9 millions, as the production in the years 1872 and 1873; that even these sums do not include the unreported gold which finds its way to New York from some mining districts by the North Pacific Railway, and that the yield will be greater in future.

2*nd*.—That for Australasia, the *Economist's* figures may be adopted, to the end of 1870, but that for 1871, 1872 and 1873, an annual average production of 10·525 millions may be taken as representing the total production, less the unreported bullion which may be exported by banks.

3*rd*.—That the figures for Russia may be adopted from the tables of the *Economist*.

4*th*.—That, with these modifications, the abstract of annual production of gold, as given at foot of the table in paragraph 5, may be stated as follows:—

Years.	Total production.			Russia.	Total.	Annual average.		
	United States.	Australasia.	Total of new sources.			New sources.	Russia.	Total.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
1849-56—8 ...	88·	59·770	147·770	25·520	173·290	18·471	3·190	21·661
1857-62—6 ...	56·640	75·125	131·765	19·182	150·947	21·961	3·197	25·158
1863-70—8 ...	78·410	92·796	171·206	26·808	198·014	21·401	3·351	24·752
1871-73—3 ...	26·740	31·575	58·315	12·600	70·915	19·438	4·200	23·638*

* Exclusive of unreported gold taken by the North Pacific Railway.

45. It would appear from recent statements in English journals that Africa must shortly be added to the preceding countries as an important source of supply of gold. In the *Times* of 17th February 1874, a correspondent at Kimberley, Trans-Vaal, in South Africa, reported the discovery of gold in the Trans-Vaal district. "Before this letter can reach England, you "will have published some accounts of the finds of gold, so that I shall not now "go much into detail. The latest news is that 13¼lbs. were found in one hour "in a single claim, the largest nugget weighing 4lbs. This gold was "brought down to Kimberley diamond fields on Christmas Day, and has excited "much admiration. I know as facts of the following finds: In one week "a party dug out 15 oz., next week 34 oz.; another party 100 oz. in four "weeks, and so on. The present number of diggers is about 500, but fully "800 are now also on their road from Kimberley. I have private letters "from *Pilgrims' Rest*—the latest received also of a highly satisfactory charac-"ter." On 20th February 1874, the *Times* inserted a confirmatory letter from Mr. S. Crowden: "I have read with pleasure your correspondent's letter "in the *Times* of 18th February, which gives a very truthful idea of the

"position, at the moment, of affairs in that part of South Africa, and I can "confirm all he says, having travelled through the country, and also resided "sometime at Kimberley. There can be no doubt of the existence of gold over "an immense extent of the interior of Africa, it having been found at "various places over nearly 1,000 miles in a north-westerly direction "from Delagoa Bay. * * Having just arrived in England after a trip "through the Australian and Californian diggings, I am so impressed "with what gold will do for a country, that I am anxious to contribute "my mite of information, in order that our countrymen may be first in the "field, and take advantage of what there is every *reason to believe is the* "*beginning of a great future for Africa.*" The *Economist*, referring to these letters, stated: "Discoveries quite recently made in the Trans-Vaal district "of the Cape of Good Hope appear to indicate gold fields not inferior to "some of the richest in Australia." The *Spectator* of 12th June 1875 observed: "It is stated that a nugget of gold, 42 pounds in weight, has been "discovered in Griquay land west. If this statement is correct, it means that "rich gold fields have been discovered, that Griquay land is about to be "colonised with a rush, and that the native question has ended once for all." The imports of gold into the United Kingdom from the British possessions in South Africa have been:—

	(Full amounts stated)						To 30th June.	
	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1874.
	£	£	£	£	£	£	£	£
Imports ...	2,022	536	200	290	19,010	306,695	116,780	90,650
Exports ...	44,293	160,655	*1,142,845	*1,389,675	216,750	10,583	4,450	...

Lastly, in the *Pioneer* of 10th August 1875, it is stated that "Mitchell, the "Geologist of the Gordon expedition into Inner Africa, is reported to "have discovered two gold mines between the Upper Nile and the Red Sea."

46. It was stated in the *Economist* of 20th January 1872, by the Paris correspondent of that journal, that "favorable accounts have been received of "the recent discovery of gold in the French Colony of New Caledonia. "** The yield of gold in French Guiana has also largely increased this year."

PRODUCTION OF SILVER.

47. In the "History of Prices," Volume 6th, page 768, Mr. Newmarch published a statement of the annual production of silver in the world, in 1800 and in 1848, which he had compiled from the work of M. Chevalier [*La Monnaie*], and he observed: "As regards silver, the general result of the "Table is to show that, in 1848, the annual produce in America was about "1 million sterling *less* than in 1800,—*viz.*, 6¼ against 7¼ millions. But "since 1848, it is certain that the produce of silver in South America has "very largely increased. M. Leon Faucher estimated that in "1851 the "American production of silver was £7,680,000, or nearly 1½ millions more "than in 1848. At the present time (January 1857), I think we are justified "in placing the American produce of silver at 10 *millions* sterling per annum, "and the total silver produce of the world at not less than 12 millions per "annum, or nearly double the annual produce in 1848. The Statement D "throws some light on this subject." This statement set forth the imports of silver into the United Kingdom from 1851 to 1856 as follows:—

	1851.	1852.	1853.	1854.	1855.	1856.	Total.	Annual average.
	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.
	£	£	£	£	£	£	£	£
Imported into the United Kingdom	Chiefly silver, partly gold.							
from Mexcio, West Indies, Peru, and partly from California ...	5·21	6·41	5·81	5·80	5·43	7·06		
Mediterranean	·37	·34	·15	·22	·29	·25		
	5·58	6·75	5·96	6·02	5·72	7·31		
	Silver.							
Estimated proportion of silver in the preceding	4·50	4·20	5·50	5·00	4·70	5·50	29·40	4·90

* Coomassie expedition.

48. The original estimate for 1848, according to M. Chevalier, included 4·08 millions as the production of Mexico, 2·12 millions from South America, 1·32 million from Europe, excluding Russia and other small items, which raised the total to £8·72 millions. The preceding figures, to which Mr. Newmarch referred as throwing some light on his increase of the estimate for 1848 by nearly 4 millions, show an increase of imports into the United Kingdom of about one million only. The much larger increase in his estimate for the year 1857 Mr. Newmarch justified further by the following reasons:—

1*st.*—That the very large supplies of quicksilver from California, since 1853, have already reduced the price of that metal more than *one-half*, thereby rendering it profitable to re-open silver mines previously abandoned, and to extend the production of silver mines actually in operation.

2*nd.*—That from this cause, and from further discoveries of silver, we may estimate the total annual production of silver as being 12 *millions* sterling in 1856, while it was only 8¾ millions sterling in 1848.

49. The next estimate of the annual production of silver occurs in the *Economist's* review of the Commercial and Financial History of 1864. The details of the estimate, which were given in an appendix to that review, are not available here; the summary of results, given in the body of the review, was as follows:—

		Annual average: silver, all sources. Millions. £	
1849—51 (3 years)	... ...	15·5	The total production in the 15 years from 1849 to 1863 was 248 millions.
1852—56 (5 „)	... ...	16·1	
1857—59 (3 „)	... ...	17·1	
1860—63 (4 „)	... ...	18·2	

The data for this estimate, which so greatly exceeded even Mr. Newmarch's estimate of 12 millions as the total annual production in 1856, are not known.

50. The next estimate occurs in Mr. Phillips' book on the Metallurgy and Mining of Gold and Silver. In that work he gives an account, *seriatim*, of the various silver mines in the Old and the New World, and their actual production for one or more years, so far as it was known, and then, in pages 319 and 320, he summarised the results as follows: "The following table gives "the approximate yield in pounds troy, of the principal silver-producing "countries of the world, at the commencement of the present century, and for "the years 1850 and 1865. In cases where the return for the year indicated "could not be obtained, the produce for the nearest year for which they could "be procured has been substituted. The quoted produce of the various "European countries, and of the United States of America, may be taken in "each instance as a sufficiently close approximation; but the figures relating "to Mexico, Central America and South America must be regarded as estimates "only. A large proportion of the precious metals produced in those countries "is annually exported, without passing through the hands of the Government "officers, and consequently the most reliable information that can be procured "is but little to be depended on. No systematic investigations have been made "on the spot by competent persons since the date of the writings of Dufort and "Chevalier":—

	Mr. Newmarch.		Mr. Phillips.			Value at 60 pence an oz. or £3 per lb.		
	1800.	1848.	1800.	1850.	1865.	1800.	1850.	1865.
	£ Millions.	£ Millions.	lbs. troy.	lbs.	lbs.	£	£	£
Old World.								
Europe, excluding Russia, but including Turkey ...	·56	1·32	141,000	404,700	499,000	423,000	1,214,100	1,497,000
Russia	·20	·20	58,150	60,000	58,000	174,450	180,000	174,000
Archipelago of Asia, and other places	·10	1 00	.....	.....	.....	.....	.....	.....
	·86	2·52	199,150	464,700	557,000	597,450	1,394,100	1,671,000
America.								
Mexico	4·80	4·08	1,440,500	1,650,000	1,700,000	4,321,500	4,950,000	5,100,000
Central and South America	2·41	2·12	697,650	685,325	750,500	2,092,950	2,055,975	2,251,500
	7·21	6·20	2,138,150	2,335,325	2,450,500	6,414,450	7,005,975	7,351,500
United States	.....	.....	.....	17,400	1,000,000	.....	52,200	3,000,000
	7·21	A 6·20	2,138,150	2,352,725	3,450,500	6,414,450	7,058,175	10,351,500
Australia	.....	... .	.....	10,000	9,500	.....	30,000	28,500
Grand Total	8·07	B 8·72	2,337,300	2,827,425	4,017,000	7,011,900	C 8,482,275	D 12,056,000

A.—Estimated by M. Leon Faucher for 1851 at £7·680 millions (paragraph 47).

B.—Increased by Mr. Newmarch for 1856 to 12 millions (paragraph 48).

C.—Estimated by the *Economist* as the annual average for 1849-51 at 15·5 millions (paragraph 49).

D.— Ditto as the annual average for 1860-63 at 18·2 millions (paragraph 49).

51. Mr. Newmarch did not estimate the quantity of annual production, nor did he state the price of silver on which he computed the value. In page 675 of his treatise, however, he observed that "the price of standard "silver has been generally regarded as about 60*d.* per ounce troy down to "1851:" and again he mentioned "the former almost stationary price of 60 "pence per ounce." Mr. Phillips' estimate in quantities has accordingly been converted into sterling at that price.

52. In its "Commercial History and Review for 1868" the *Economist* reproduced the estimate of 1864 (paragraph 49) with an additional item of £19·5 millions as the annual average production for the five years from 1864 to 1868, against an estimated annual average for 1849—57 of 15·5 millions, which in its turn was 3 millions in excess of Mr. Newmarch's overestimate for 1856. These enormous estimates were corrected by the *Economist* in the "Commercial History and Review of 1874," in which the following passage occurs: "The price of silver, 58$\frac{5}{16}$ pence, is the lowest on record—arising more "immediately from the pressure on the market of the large amounts of silver "coin displaced in Germany by the new coinage and banking legislation there; "and arising also, it is believed, in some degree, from the increased yield of the silver mines in South America and elsewhere." (The published reports of British Consuls in South America for 1871 and 1872 do not mention any such increase.) "M. Herzog, the delegate of Switzerland to the monetary "conventions of 1865-71, has investigated the subject with care, and has "framed the following table," of which, only the amounts of annual production are here reproduced:—

Years.	M. Herzog.		(From para. 17.)	Years.	M. Herzog.		(From para. 17.)
	Annual production.	Total and annual average.	Production of Nevada.		Annual production.	Total and annual average.	Production of Nevada.
	£	£	£		£	£	£
1851 ...	9·		.....	1863 ...	13·		1·667
1852 ...	8·8		.....	1864 ...	13·2		2·133
1853 ...	8·4	62·4	.....	1865 ...	14·7		2·240
1854 ...	8 5		.....	1866 ...	14·4	112·3	2·200
1855 ...	9·	8·9	.....	1867 ...	14·7		2 487
1856 ...	9·1		.....	1868 ...	14·0	14·0375	2·000
1857 ...	9·6		.....	1869 ...	13·5		1·867
				1870 ...	14·8		2·133
					Total.	Annual average.	
1858 ...	10·2						
1859 ...	10·2	54·2	·007	1851-57 ...	62·4	8·9	
1860 ...	10·6		·013	1858-62 ...	54·2	10·84	
1861 ...	11·2	10·84	·303	1863-70 ...	112·3	14·0375	
1862 ...	12·0		·867		228·9	.....	

53. The latest estimate is that quoted in the *Pall Mall Budget* of 18th June 1875: "A writer in the *Deutsches Handelsblatt* has collected statistics of "the production of the precious metals throughout the civilised word from the "beginning of the sixteenth century to the year 1873, which, though only "professing to be approximately accurate, are yet worth reproducing." Unfortunately the summary in the *Pall Mall Budget* does not give the production of silver in each year for any part of the period under review. "The "quantity of silver raised in the same twenty-five years (from 1849 to 1873) "is estimated at 69,000,000 lbs., or £310,000,000 sterling in value." But this valuation is at a price, for silver, of 89·85 pence per ounce. At 60 pence per ounce, or three pounds sterling for one pound troy, the total production of 69 millions of pounds for the 25 years from 1849 to 1873 would give 207 millions sterling, against M. Herzog's estimate of 228·9 millions for twenty out of those twenty-five years. Probably, however, German pounds are meant, though in a subsequent part of the article the price of silver in London per ounce troy is quoted. For a German pound the price has to be increased by one-third, or from £3 to £4: this gives 276 millions sterling for 25 years, and agrees, in its annual average of 11 millions, with M. Herzog's estimate

of 229 millions for twenty-years. Thus, the excessive additions to actuals, which were made in Mr. Newmarch's estimate in 1857 and in the estimates by the *Economist* in 1865 and 1869, have been subsequently reduced twice, *viz.*, by M. Herzog, with the concurrence of the *Economist*, in 1874, and by a later writer in 1875 who confirms M. Herzog's estimate.

54. In its estimates in 1865 and 1869 the *Economist* appears to have adopted Mr. Newmarch's excessive estimate of January 1857, and to have added thereto the gross production of the Nevada mines, which were discovered in 1859,—overlooking the circumstance of that gross production including gold to the extent of at least one-third its gross value. Perhaps M. Herzog has similarly erred, for his estimate for 1870 (14·8 millions) exceeds that for 1859 (10·2 millions) by 4·6 millions, though the silver produce of Nevada in 1870 was only 2·133 millions, and though it is generally admitted that the principal increase of silver production since 1859 has been from the Nevada mines. By adopting M. Herzog's account, the annual production of silver will certainly not be under-estimated.

55. M. Herzog's estimate of 14·8 millions stopped at 1870, in which year the gross production of gold and silver from the Nevada mines was—

	Increase for Nevada.				
	Dollars millions.	Dollars millions. Gross increase of produce.	Dollars millions. ⅔rds for silver.	£	Total production of silver. £
1870 ...	16·	...	...	...	14·8
1871 ...	22·	6·	4·00	·800	15·6
1872 ...	25·550	3·550	2·366	·473	16·1

The *Pall Mall Budget* observed, "With regard to the present produc-"tion of silver, it appears from official American statistics that between 1848 "and 1858 the yield of the United States did not exceed £30,000 per annum. "In 1873 it had risen to £7,150,000. The aggregate outturn of other countries "the German writer estimates at about £10,350,000, which would give a total "annual production of about 17½ millions. This estimate is lower than those "generally accepted in this country, but if it is an under-estimate, the infe-"rence is thereby strengthened that the value of silver must continue to fall." The statement of £7,150,000 as the silver produce of the United States in 1873 would give 35,750,000 dollars of silver, against 25,550,000 of gold and silver, the produce of the Nevada mines in the immediately preceding year 1872. The German writer has fallen into the common error of reckoning the whole, instead of two-thirds, the produce of the Nevada mines as silver. A silver produce of 35,750,000 dollars in 1873, against 17,033,333 dollars (two-thirds of 25·550 millions) in 1872 would give a total produce for Nevada of £7·150 millions and an increase over 1872 of £3·743 millions or of more than 50 per cent. The bulk of the produce of Nevada comes to the United Kingdom;—but the silver imported into the United Kingdom from the United States was only £4·618 millions in 1872, £5·092 millions in 1873, and £3,477 millions in 1874. The whole of this is not Nevada silver. There are no traces, in the movements of trade, of the enormous increase involved in the statement that the silver production of the United States in 1873 amounted to £7·150 millions.

56. If the German writer's estimate (£10·350 millions) be accepted as the amount of existing production of silver outside the United States, and if £4·766 (two-thirds of £7·150 millions) be added as the produce of Nevada in 1873, the total production of silver in the present day would be £15·116 millions, against £16·1 millions as ascertained in 1872 (paragraph 55) or £17·43 millions as calculated for 1873 on the basis of M. Herzog's estimate up to 1870, with the subsequent increases of the Nevada produce. This estimate is adopted in deference to two competent guides, of whom one writes with an authority which is mentioned with respect by the *Economist*, while the other is accredited by an

equally well informed journal. Still the estimate is large, and without assuming an enormous consumption of silver in the arts, it would be difficult to account for the absorption of this large annual produce in the countries which retain a silver currency.

57. In page 142 of the sixth volume of the "History of Prices" Mr. Newmarch estimated, as the final result of careful investigations, that the stock of the precious metals in America and in Europe, in 1848, was 560 millions of gold and 800 millions of silver. Other considerations seemed to him "to "justify the inference that, throughout extended periods of time, silver dis- "appears from the commercial countries of the West *four times* more rapidly "than gold—or, what comes to the same thing, that in those countries addi- "tions to the stock of gold are operative, as regards mere quantity, four "times longer than additions to the stock of silver." The immense export of silver to the East, since January 1857, when Mr. Newmarch wrote, has strengthened this statement. Accordingly, had there been no fresh production of gold and silver, the quantity of the latter would have been reduced in a proportionally much greater degree than gold, and silver should have much appreciated in value relatively to gold; furthermore, this result should have been aggravated if the quantity of new production since added to the stock of 1848 has been proportionally larger for gold than for silver. The additions to the old stock have actually occurred in this way; yet the price of silver is less now than it was in 1848.

58. The old stock of gold and silver, and the additions thereto, have been as follows:—

	Gold. Millions. £	Silver. Millions. £	Total. Millions. £
1848	560	800	1,360
1849 to 1873	593*	279†	872
	1,153	1,079	2,232

* Paragraph 44.
† Paragraphs 52 and 55, with 18 millions additional for 1849 and 1850.

In 1848 the gross stock of silver was greater than that of gold, whereas, at the end of 1873, it was less than the gross stock of gold, and the amount of silver in 1873 would be still less if the unequal wear and tear and loss in the circulation of the precious metals in Europe and the United States were to be deducted; yet the price of silver is now 56 pence an ounce, against 60 pence an ounce in 1848.

59. The ascertained facts of actual production of gold and silver are included in the preceding statements; and as these do not explain the fall in the price of silver, journalists have endeavoured to account for it by conjectures. These are summed up in vague statements: 1*st*, that the production of gold has fallen off; 2*nd*, that new silver mines have been discovered or old mines of silver have become more productive; and 3*rd*, that the demonetisation of silver in Germany has thrown a large amount of it on the market.

60. It has been shown that the production of gold has not fallen off, if, indeed, it has not increased. The statements on the second and third heads may be quoted;—they are as follows:—

1*st*.—On 10th January 1874 the *Economist* wrote:—"It is the apprehended "sale of the demonetised silver of Germany which makes the *whole* "*silver market* and the exchange on countries which have a silver "currency so weak."

2*nd*.—Messrs. Mocatta and Goldsmid in their report on the bullion market for 1874 stated:—"This continued downward tendency in the price of "silver has, to a great extent, been caused by a fear that the market "might at any moment be inundated with silver liberated by the "operation of the German Currency Act,—an apprehension in some "degree justified by the shipment from Germany at irregular intervals "of large direct consignments of silver to India; France and Belgium, "under these circumstances, have not purchased freely, and Holland "has shown still less inclination to take silver, so that the market "has become much more limited than formerly." (Holland and Belgium are accumulating gold for the alteration to a gold standard, and France for the resumpion of specie payments.) "*Mexican* dollars

"have been affected not only by the lower value of silver, but by a "less active demand from China than in previous years."

3rd.—Reviewing a table of the price of silver since 1847, the *Economist* of 7th March 1874 observed:—"The first rise in 1854-60 was manifestly due to the abundance of gold consequent on the Australian "and Californian gold discoveries;—an abundance which was at its "height about 1857; and the second rise in 1862-65 was as plainly "owing to the extraordinary demand for silver for export to the East, "which was caused by the famine prices of cotton, and the large "imports of that article from India during the American civil war. "The fall which is now in progress is immediately owing to the pressure of the demonetised silver of Germany coming upon a market "which previously was perhaps tending to be weak from the large "production of silver in recent years." And again on 11th April 1874: "When it is taken into account that additional sums of "silver have gone to India, and that the Bank of France has also "been drawing silver from both Belgium and Germany to the extent, "it is believed, of several millions sterling, it will be obvious that "the recent demand has done a good deal to reduce the plethora of "silver which the German demonetisation, the recent increase of the "silver production of the world, and the establishment of so many "inconvertible paper currencies, among the silver-using peoples, have "helped to produce. The price, however, shows that silver is still "very far from being scarce."

4th.—*Economist, 19th September* 1874:—"Whether the change is mostly "caused by the demonetisation of German silver, or by the increased "production of the mines throughout the world, or by the falling off "in the production of gold, or by all causes combined, the present "low price of 57¾*d.* per oz. is a fact of no slight economical importance, and we must look forward, with some interest, to see whether "the fall will continue."

5th.—*Economist, 10th October* 1874:—"The old silver circulation in "Germany, indeed, is still a concurrent legal tender in Germany; "some of it has been withdrawn, but what remains is in no respect "demonetised; it is good money as ever it was. "But it is likely to "be demonetised soon, and the dread of the operation depresses the "silver market; no one likes to hold more silver than he can avoid." (For the matter of that, no one likes to hold, at any time, more gold or silver than he can avoid, interest being lost for the period of its retention).

6th.—*Economist, 23rd August* 1873.—"£47½ millions of the old silver "coinage have still to be withdrawn. This large amount,—at least, "more than two years' annual supply,—is likely to be thrown upon "an overstocked market within the next year or two, and the effect "on the price of silver may be imagined. Hitherto the price has "been in part kept up by the purchases of the French Government, "which has paid a part of the indemnity in silver coin; but it seems "doubtful now that France will continue to be a purchaser."

7th.—*Commercial History for* 1873.—"The demonetisation of silver in "Germany and several other States, and the increased production "of the metal itself, combined with a falling off in the requirements for it in the East, have produced great changes in the price "of standard bars."

61. The main facts recited in these extracts are the final cessation of demand for silver as currency, by Germany, which has determined to demonetise it, and by Belgium and Holland which are preparing for its demonetisation;—also a (possibly temporary) cessation or abatement of demand for China, the balance of trade in her favor being less than formerly. These facts, however, were regarded in the extracts, as of slight significance or importance, compared with the effect upon price of the apprehension of a sudden sale of large amounts of silver by Germany (which, hitherto, has endeavoured to dispose of silver with the least possible disturbance of the market), and compared with

the vague impression that the production of silver in the world has greatly increased within the past two or three years.

62. The silver of the old German coinage, which is to be superseded by gold, is estimated at 52 millions sterling, or, adding the proportion of the war indemnity received in silver, at 62½ millions sterling (paragraph 103):—"A well informed Hamburg correspondent," in the *Economist* of 4th April 1874, wrote: "The Government of the Empire have frequently been urged to make haste in "selling the German silver, and in the Parliament, as well as in the press, "people have urged that the German silver ought to be sold without any delay, "and at any price. It will not escape your sagacity that this would be a policy "ruinous in a financial point of view, and threatening the money market of the "world, and the London money market as its centre and representative, with "great disturbance. I therefore never thought it likely that the Government "would follow the advice given by the radical gold ultras. On the other "hand, it is evident that it is necessary for the Government to sell as "much of our superfluous silver as can be got rid of at tolerable prices, "and you know best how very small hitherto the sales have been. In "the debate in the German Parliament of the 26th March, Dr. Bamberger, a "great authority in all financial and monetary matters, alluded to the trifling "character of the sales hitherto effected. He estimated the whole amount "disposed of at ten millions of thalers (1½ million sterling), and saying that this "sum was equivalent to nothing, compared with the great quantity we have to "sell, he pressed the Government to take more vigorous measures, for, else, the "good luck by which, as he was very right in observing, our monetary "measures, hitherto, have been favored, might turn, and very awkward conse-"quences might follow. To these observations President Delbruck made the "following reply: 'If the demonetisation of the silver coin has as yet not "'been effected in such a degree as was pointed out as desirable by the last "'speaker, many causes, and causes of different character, have combined to "'bring about such a result. The principal of these causes is the real impos-"'sibility of withdrawing from circulation the silver coins at once and speedily. "'We are under the necessity to employ the whole power of the German Mints "'in the manufacturing of small coins, *viz.*, of copper and nickel coins, and "'then of one mark prices.'"

After having explained that this necessity was brought about by the wants of Southern Germany, Mr. Delbruck summed up as follows: "Those silver "coins which have been subjected to demonetisation, in order to sell them, "have been sold at reasonable prices. We continue the demonetisation of "silver coins for the same purpose, as far as it is possible, and you may feel "confident that we have the earnest intention, and that we are at the same "time able, to keep a stock of silver, affording the opportunity of using any "favorable chances the market may offer." The Hamburg correspondent resumed: "I have made these quotations from the official reports, in order to "show that the German Government is by no means reticent as to its inten-"tions. The plain truth is that it has, as yet, no considerable stock of bar "silver, but that it is about to establish such a hoard. As long as the present "privilege of the Bank of Prussia remains unaltered, this may be done "without loss of interest, this Bank being entitled to keep part of its bullion "in silver bars. But whether such a stock of German silver exists already "to some extent, or whether it is only part of a future plan, at all events the "Government has no intention of selling unless it can sell at convenient "prices. The idea, countenanced by the gold ultras I have mentioned before, "that the German Government was going to sell the great mass of silver, as it "were, by auction, is therefore an erroneous one."

63. It is evident from this quotation that up to March 1874 the German Government had sold but little silver, and that its policy of not selling silver, except at convenient or reasonable prices, was so well understood as to preclude apprehensions of its suddenly throwing an immense amount of silver on the market.

64. With respect to the other conjecture of an increased production of silver, the ascertained facts have been already recited (paragraphs 53 to 56). The principal increase has occurred in the Nevada mines, which add one pound to the supply of gold, for every two pounds of increase in the supply of silver.

Apart from this, a careful search in the pages of the *Economist* from 1872 to 1875 has failed to elicit trace of the discovery of any new silver mine, or of proof that the production of any silver mine (except in Nevada) has increased. There have indeed been rumours of discovery, or of immense yields, but these appear to have been circulated for launching new mining speculations on the market. In his Commercial Report for 1871, the British Consul at San Francisco wrote: "A good many California and Nevada mines have been sold during the past year "in the London market, and the price paid for them has generally been far in "advance of their recognised value here. The almost insatiable demands of "the California and Nevada 'operators' and the London Stock Exchange have "in some instances caused the par value of the shares of a Company to be five "times or more than what the mine has or should have cost." In the next year's report he mentioned the collapse of most of these speculations. The *Economist* of 20th June 1874 told the story of the shareholders of the Emma mines in Nevada, who were "naturally indignant at finding that they have been "long without dividends, and that the shares which were issued at 20*l.*, and "which were once, we believe, quoted upwards of 30*l.*, are now saleable only at "2*l.* * * The mine was sold, according to the prospectus, as a property "yielding £700,000 a year; and not only so, it was stated that the ore was so "abundant and so rich that no attempt had been made to work the mine on "commercial principles of economy, and with economy the annual return "could be brought up to nearly £800,000. * * But the mine, in fact, has "never yielded anything worth speaking of, and the Company's Engineer, "who was sent out by a reformed management to inspect and survey the "property, distinctly reported that it was in a wretched condition." The *Economist* of 6th February 1875 stated: "Reference has been frequently "made in American newspapers, during the last two months, to great mining "discoveries which have been made in the famous Comstock lode in Nevada. "In two mines, the Consolidated Virginia and California, it is alleged that a "'bonanza' has been reached containing 500 millions dollars 'worth of rich "silver ore, and all kinds of reports are circulated as to the confirmation "which has been given by actual explorations to the wonderful accounts which "are received. What is undoubted is that there has been a furious mining "speculation at San Francisco in the above and adjacent mines. * * We "observe it has been stated in New York papers, on the alleged authority of "the American Commissioner of Mining Statistics, that the mines are capable "of producing ten millions annually after April next; but the whole reports "are vague, and although they have perhaps acquired sufficient consistency to "justify our reference to them, for the important effect any such discovery "would have on the price of silver, and in a less degree on gold, yet "we can only imitate the discretion of our New York contemporaries in "waiting for further information before attempting to estimate what "real truth there is in those alleged discoveries." On 20th February 1875 the *Economist* quoted the following from the Philadelphia correspondent of the *Times*: "The great 'bonanza' in Nevada is dwindling, as was to have "been expected. Language still fails some of the writers on the subject to do "sufficient justice to the vast wealth said to have been discovered in the mines "on the Comstock lode; but the recent telegrams shew that either the stock "jobbers on the San Francisco exchange have become wealthy enough, or else "there is something wrong with the 'bonanza.' There has been a great decline "in the price of mining shares of all descriptions, the recent remarkable rise "of which was based upon the 'bonanza.' During the past week 'California' "and 'Virginia consolidated' have receded 20 per cent., and shares of all the "other mines have fallen, the decline varying from 10 to 50 per cent." Nevertheless, the *Economist* believed "there is a strong opinion among respectable "American houses, here as well as in New York, who are likely to be well in-"formed, that very valuable discoveries have been made; but it remains to be "seen of course, what their exact value will be. Now that the Stock Exchange "'rig' is passing away, we shall be more likely to have the truth, and the "increase of production which ought to follow such a find ought soon to make "itself felt." This was stated on 20th February; the subsequent issues of the journal to 17th July 1875 contain no confirmation of the reported find, and the imports of silver from the United States into the United Kingdom, in the six months up to 30th June 1875, amounted to £1,293,258 against £2,046,925 in the corresponding period in 1873, and against £3,647,830 in the same period in 1872.

65. The further investigation of the cause of the diminished price of silver may be deferred for a while. The present annual production of gold and silver having been ascertained, the current and the probable future annual demand on that supply may be considered under the two heads of, 1*st*, the countries which require gold for altering their standard to gold, or for resuming specie payments; 2*ndly*, the countries which, having already a gold currency, require an annual supply for replacing wear and tear of coinage, and for increasing their metallic circulation as their trade increases. In addition to these demands, there is the consumption of gold and silver in the arts.

66. Among the countries with an inconvertible paper currency, the early resumption of specie payments is probable only in the United States and in France. In the United States, as shown in Appendix B, para. 56 a sum of 25 millions sterling may require to be accumulated in gold before specie payments can be resumed.

67. The French Government declared war against Prussia on 15th July 1870, and on 12th August suspended specie payments, and limited the issues of the Bank of France to 72 millions sterling, but in three days increased the limit to 90 millions sterling. The object of the increased issue, and of declaring the notes inconvertible, was to enable the Bank of France to lend money to the Government, to the extent of the additional issue, at one per cent. per annum. The state of the Bank of France before and since the war is shown in the following table, which is taken from the Commercial History and Review by the *Economist*:—

IN MILLIONS STERLING.

	Liabilities.					Assets.				
1	2	3	4	5	6	7	8	9	10
	Annual average rate of discount at Paris.	Circulation of Bank notes.	Deposits.	Other liabilities.	Total.	Coin and bullion.	Discounts.	Advances on bullion stocks and shares.	Other assets.	Total.
		£	£	£	£	£	£	£	£	£
December.										
1862	...	31·26	11·08	9·78	52·12 (*Sic*)	12·76	32·79	7·45	9·10	52·10 (*Sic*).
1863	..	30·20	8·56	10·47	49·23	8·52	24·51	5·66	9·16	47·85
1864	...	29·69	9·21	10·37	49·27	13·10	22·57	3·66	9·93	49·26
1865	...	34·58	11·43	10·05	56·08	17·53	25·54	3·74	9·26	56·07
Average	..	31·43	10·07	10·17	51·67	12·98	23·85	5·13	9·36	51·32
1866	...	38·32	17·85	10·34	66·51	27·17	24·81	5·09	9·41	66·48
1867	...	45·71	19·97	10·75	76·43	39·48	21·05	6·16	9·74	76·43
1868	...	51·69	20·41	10·80	82·90	46·76	19·50	5·42	11·22	82·87
1869	...	54·91	23·60	11·42	89·33	49·34	24·47	5·13	10·99	89 93
Average	...	47·66	20·46	10·82	78·94	40·68	22·46	5·45	10·34	78·93
September.										
1870	..	69·20	31·55	9·68	110·43	33·76	57·82	6·70	12·15	110·43
December.										
1871	...	91·85	17·89	14·89	124·63	25·41	38·12	4·11	66·99	124·63
1872	..	105·52	23·64	12·26	141·42	31·67	40·42	5·04	64·29	141·42
1873	...	115·35	13·41	12·64	141·40	29·31	45·48	5·53	61·08	141·40
Average	...	95·48	21·62	12·37	129·47	30·05	42·96	5·34	51·12	129·47
1874	...	103·43	15·40	12·21	131·04	52·23	29·12	4·05	45·64	131·04
	6	5½	5½	4½						

NOTE.—The accounts of the Bank ceased to be published from the 8th September 1870 and did not re-appear till 29th June 1871. The amounts in column 8 include, from 1871, the unliquidated portions of the Bank's war loan to the Government of 50 millions sterling.

68. The public loans contracted by the French Government for the expenses of the war, and for the payment of the war indemnity, have been as follows:—

	Francs. Millions.	Known as loans in sterling of £	Issued at
3 per cent. issued in August 1870	800	..	...
6 „ „ National defence or Morgan loan ...	200	10	85
5 „ „ June 1871 (1st)	2,225	880	82½
5 „ „ July 1872 (2nd)	3,500	140	84½

The war indemnity, under the treaty of 1st March 1871, was fixed at 200 millions sterling, payable in the proportions of 40 millions in 1871, 80 millions in 1872, and 100 millions in 1873. The loans for making these payments were issued in two instalments in 1871 and in 1872, but the payments of subscriptions to the second loan extended to 1873. The limit of 90 millions sterling, paid in 1870 for the issue of inconvertible paper, was not availed of to the full extent; but after launching of the first loan in 1871, the limit was increased in December 1871 to 112 millions, from which sum it was raised to 128 millions sterling, on the occasion of launching the second loan of 140 millions in 1872. Hence the exceptional increase of the circulation of notes in 1872 and 1873;—but, except for a very brief period, the actual circulation never approached the current limit.

69. Owing to this abstinence in the issue of notes, and to the increased commerce of France, particularly of her export trade, also to the investment by other countries in the French loans, and to the transfer of large amounts of foreign stock from French to other markets, the premium on gold was never large. In August 1872 it was half per cent. or five per thousand. On 27th February 1873, the Paris correspondent of the *Economist* wrote: "The premium on coin has now almost disappeared, that on gold being quoted to-day at only 2¾ per thousand, and that on silver zero." In the middle of the year it rose slightly, consequent on additional payments to Prussia;—but from November 1873 it ranged at ½ to 2 per mille. with a rise on only one occasion to 6, from which it fell to 3½ per mille.; and on 26th December it was 1¾ per thousand. These rates of premium were not higher than the premium on gold which obtained in 1862, 1863, and 1864. On 31st January 1874, French gold coin reached par, while silver coin had fallen to a discount of 2 per thousand. In a discussion in the French Assembly in July 1874, it was stated that by M. Leroy-Beaulieu that "the critical period of the forced currency had passed "over, and, in reality, the forced currency now only existed nominally, for the "Bank paid small sums not only in silver but in gold."

"The following are the days in each year, up to 9th July 1874, on which the maximum amount of cash held by the Bank of France was reached, *viz.*:—

	Gold. Francs Millions.	Silver. Francs Millions.	TOTAL. Francs Millions.
1869, December 23rd	704	501	1,205
1871, August 25th	591	98	689
1872, December 18th	657	133	790
1873, June 5th	690	125	815
1874 „ 17th	845	318	1,163

70. On 30th July 1874, it was reported that "the Bank (of France) "has recently ceased to re-issue its 20-franc notes as they come in, replacing "them by silver five-franc pieces, of which about 200 millions have now been "issued."

71. On 10th December 1874, the Paris correspondent of the *Economist* wrote:—"The Paris Mint has commenced coining a sum of 40 millions of "francs, in 20-franc pieces for the Bank of France. The new coin will be "employed to facilitate the withdrawal from circulation of the notes of the "same amount. The circulation of 20-franc notes, which at one moment "reached 670 millions, has already been reduced to 360 millions." And again, on 17th December 1874:—"The withdrawal of the 20-franc notes of the "Bank of France from circulation, in exchange for gold, appears to be a

"measure of more importance than at first supposed. The amount of these "notes in circulation had already been gradually diminished for some time "past; but, perhaps for the reason that the measure had been carried out "quietly and almost secretly, it had failed to produce the effects which "appear to have been counted on. The Bank had paid out a considerable "sum of gold, but which, nevertheless, very rarely appeared in circula- "tion, business transactions continuing to be mainly carried on in small "notes and silver coin. The Bank is now about to adopt a more radical "measure; it will cease to issue the 20-franc notes paid in, replacing "them by gold, and the Government officers, Railway companies, &c., will "assist in withdrawing them from circulation immediately. The object of the "Bank in thus putting in circulation a sum of over 300 millions of gold is to "create an abundance of that metal; as there will be no difficulty in obtaining "it, the public, it is expected, will cease to hoard it, and will open the hoard "they have already made. This measure will be not only a step towards a "future resumption of specie payments, but an experiment as to the possibility "of their being resumed without inconvenience. If the public continue to "hoard the gold, it will be a proof that the forced circulation could not be "terminated without a danger of a drain of the reserve gold. But if the public "manifests an indifference for the gold, and after taking it returns it to the "Bank, this will be evidence that the resumption of specie payments "might be attempted without danger at no distant date. If the ex- "pectations of the Bank are realised, the calling in of the 20-franc notes "will not cause any diminution in its reserve of gold, or only a temporary "diminution, in consequence of the setting-free of the mass of gold now in the "hands of the public and withheld from circulation. The forced circulation "is practically at an end, as gold is not refused at the Bank, for a reasonable "amount, to its customers, and the right of withholding it would only be "exercised when the Bank had reason to suppose that it was demanded for "purposes of speculation." On 4th February 1875, the same correspondent wrote:—"The reserve of cash has again a large increase. The withdrawal of "the small notes from circulation has produced no appreciable effect on the "reserve, or the issue of gold by which they have been replaced has passed "unperceived in the influx of gold from abroad or by the hoards let loose in "the country. The experiment of the Bank as to whether it could open its "coffers without danger must be considered to have received a satisfactory "answer. The Bank might now safely go a step further and make the "measure general, by abolishing the forced circulation."

72. On 18th February 1875, the same correspondent continued: "The "rumour I see mentioned in a London paper that the Bank of France will "shortly withdraw its notes of fifty-francs is, I believe, at least premature, "not from the inability of the Bank to replace them with coin, but from "considerations of the public convenience. Although there is a certain "quantity of gold in circulation, it is still relatively rare, and has not yet "penetrated into the poorer quarters of Paris, and into the Provinces. The "retail trade is almost entirely carried on with silver coin and notes, and "many persons who receive the whole of the change of a fifty-franc note in "the heavy five-franc pieces, on making a small purchase, regret the twenty- "franc notes which have disappeared from circulation. The inconvenience "would be greater if, so long as gold is not in general circulation, there "was no currency between five-franc pieces and one-hundred-franc notes, "and the more so that silver is legal tender to any amount." On 1st July 1875, the same correspondent stated: "The circulation has a large increase, "owing to the diminution in the private deposits by the withdrawals of the "banks and railway companies for the payment of the July coupons. The "reduction in cash is due to the same cause, the Bank of France, since ceas- "ing to issue its small notes, now giving a portion of gold or silver in its "payments when asked for."

73. Evidently there is plenty of gold in France for immediately resuming specie payments, were there not certain other obstacles. The two principal are,—the war loan, by the Bank, of 50 millions sterling, bearing interest at one per cent. per annum, and the six-per-cent. Morgan loan. Until the discharge

of this loan, it is financially inexpedient for the Government to repay the Bank of France at a faster rate than that prescribed in the treaty for the loan; and furthermore it was inexpedient to attempt the redemption of the Morgan loan till the five-per-cent. loans should have reached par. On 6th August 1874, they were at par, but for the remainder of the year they slightly declined. On 7th January 1875, they had attained to a small fractional premium from which they advanced to 103·45 by 18th March 1875; and on the 15th of that month, the Minister of Finance presented in the Assembly a Bill to give the required six months' notice, so that the Morgan loan might be discharged in October 1875. A Bill for allowing holders of the stock the option of converting into the five per cents at par, which had been introduced by M. de Soubeyran and had been favourably received, was withdrawn upon Government taking up the matter.

74. The progress in removing the other obstacle, that is, in reducing the debt to the Bank, has been as follows:—

	8th September 1870.	24th August 1871.	18th July 1872.	10th July 1873.	9th July 1874.	8th July 1875.
	Francs. Millions.	Francs. Millions.	Francs. Millions.	Francs. Millions.	Francs. Millions.	Francs. Millions.
Notes in circulation ...	1745·051	1947·343	2415 727	2916·797	2537·691	2421·033
Treasury bonds ...	...	1195·701	1330·268	1328·063	867·163	746·863
Coin and bullion in hand and in branches.	808·779	687·654	744·921	753·531	1209·375	1551·321

The Government has reduced its debt, but the Bank has not yet decreased its circulation; rather, it has increased the note circulation since 24th August 1871 by 447 millions, while the Government has reduced its debt by nearly the same amount, or 449 millions, the reason being that the Bank has increased its amount of coin and bullion in the same period by 863 millions.

75. The Bank of France having a capital of only 7·30 millions sterling, and ordinary and special reserves of 1·20 million, in all 8·50 millions, of which slightly more than a quarter million has been spent on landed property, bank furniture, &c., while one-half of the remainder is locked up in a permanent loan to Government at three per cent., the funds for the business set forth in para. 67 are mainly derived from deposits and from a part of the circulation of bank-notes. Gathering up the results given in paras. 67 and 74, we have the following figures:—

	ANNUAL AVERAGE FOR						
	1862 to 1865.	1866 to 1869.	1870 to 1873.	1869 December.	1870 September.	1874 December.	1875 8th July.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
Deposits	10·07	20·46	21·62	15·40	31·55	15·40	17·27
Discounts and advances on stocks, shares, &c. ...	28·98	27·91	48·30	29·60	64·52	33·17	35·37
Excess of discounts, &c., over deposits	18·91	7·45	26·68	14·20	32·97	17·77	18·10
Note circulation	31·43	47·66	95·48	54·91	69·20	102·43	96·84
Coin and bullion ...	12·98	40·68	30·05	49·34	33·76	52·23	62·13
MERCHANDISE.		1869.	1870.	1871.	1872.	1873.	1874.
Imports		126·12	114·70	135·73	137·90	142·19	149·02
Exports		122·99	112·08	114·03	147·16	151·49	155·11

76. Comparing the business on 8th July 1875 with that in 1862 to 1865, there was an increase of about seven millions sterling in deposits and in discounts, the excess of the discounts over the deposits remaining nearly the same in the two periods; this shows that the increase in note circulation of 65 millions, and in coin and bullion of 49 millions, on 8th July 1875 over 1862 to 1865, was not caused by the requirements of general business. Referring also to the table in para. 67, it is seen that in 1862 and 1863 the proportion of coin and bullion to the total of note circulation and deposits, *viz.*, 20 per

cent., was unduly low; in 1864 and 1865 the proportion was fair, *viz.*, 36 per cent.; but with 1866, the year of the Austro-Prussian war, and of the victory of Sadowa, it began to rise from 48 per cent. in 1866 to 63 per cent. in 1869. This high percentage of bullion and coin was evidently dictated by political considerations. Putting these aside, some 18 millions sterling in gold might be liberated for use in other countries, on the resumption of specie payments by the Bank. Thus:—

	£	£ Millions.
Total note circulation on 8th July 1875		96·84
Excess of that circulation over the circulation in December 1869	41·93	
Less increase in excess of discounts over deposits in the two periods	3·90	38·03
		58·81
Deposits on 8th July 1875		17·27
		76·08
Ordinary reserve of coin and bullion, say $\frac{2}{5}$ths of the above		30·43
Actual coin and bullion on 8th July 1875 ...	62·13	
Less required for withdrawing notes equal to the debt paid by the Government (para. 74) ...	17·95	
		44·18
		13·75

Thus 14 millions would be set free for foreign countries on resumption of specie payments. But besides this, a considerable part of the 17·95 millions required for redeeming notes equal to the amount of debt already discharged by the French Government may not be retained in circulation in the country, and hence, the total amount of gold to be set free may be not less than 18 millions sterling.

It is not necessary to allow for any reserve of gold for withdrawing notes equal to the amount of debt still due by the French Government. That debt may be settled,—1*st*, by funding the amount, in which case the bank on receiving stock, will cancel an equal amount of notes; or 2*ndly*, by payment of the amount in notes, in which case the notes would be cancelled, or 3*rdly*, by payment in gold, in which case it would suffice to add two-fifths or one-third of the gold to the bullion and coin reserve, and to liberate the remainder for use in foreign countries.

77. These conclusions may be vitiated if the Bank of France has accumulated its present hoard of coin and bullion by withdrawing it from home circulation, instead of importing it from foreign countries. On this head the facts are as follows:—

	1870.	1871.	1872.	1873.	1874.	1875. (5 mons.)	Total.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
Gold—							
Imports ...	12·41	5·41	5·57	6·98	20·67	13·44	64·48
Exports ...	7·62	14·90	7·79	11·36	3·43	2·21	47·31
Net ...	...	...	...	...	...	...	17·17
Silver—							
Imports ...	4·24	6·03	10·43	16·16	17·37	4·41	58·64
Exports ...	2·82	7·41	5·54	8·67	2·94	·99	28·37
Net ...	...	...	...	...	...	...	30·27

There have been a net importation of 17·17 millions of gold, against an increase of coin and bullion in the Bank on 8th July 1875, over December 1869, of 12·79 millions, and a net importation of silver to the amount of 30·27 millions.

78. Of the preceding net imports a portion may have been exported by land, principally for payment of the war indemnity to Germany. M. Leon Say in October 1874, in summing up the final account of those payments stated: "The definitive amount of the debt including interest, amounted to 5,301,145,078 francs, the total amount received by Germany was 5,315,758,853 francs, leaving a balance of 14,613,674 francs due to France. The total sum of 5,315 millions comprised the 325 millions allowed for the railways in the annexed provinces, and a sum of 98,400 francs forming a balance due by Germany to the city of Paris, in the operation for the payment of the war contribution levied on the city after the siege, with which sum the French Government was credited. The remaining sum of 4,990 millions was made up as follows:—

	Francs.	£ Millions.
Notes of the Bank of France	125,000,000	5·
French gold coin	273,003,058	10·92
„ silver coin	239,291,875	9·57
Bills	4,353,365,520	174·14
	4,990,660,453	199·63

The net result is that up to July 1875, France has added to the amount of gold and silver which she had before the suspension of specie payments. Hence the following remark by M. Bonnet, in August 1874, was no mere surmise, but a statement of fact:—"In England, during the forced currency, as in "Italy and Austria at present, the circulation was increased to replace the "metal which was leaving the country. But in France the case was different: "the specie remained in France, hoarded in the pockets of the people, although "it had ceased to circulate: but it was known to be there, and would be found "again some day, and that fact would give stability to the notes which replaced "it. Thus, with the stock of specie in France, which amounts to 5,000 or "6,000 millions, the note circulation resembles that of the former deposit "banks of Venice, Amsterdam, and Hamburg."

79. Hence, it would appear that on resuming specie payments, France will not make a special demand on the annual supply of gold, but on the contrary may surrender several millions of special reserve for meeting the special demands of other countries, such as Germany and the United States.

80. But it remains to be ascertained whether, in resuming specie payments, France will renew or will discontinue her demand of former years on the annual supply of silver. The able advocates, in France, of a double standard, do not consider that they have, in any degree, been overcome in argument;—but facts have gone against them. 1*st*, silver is all but demonetised in France, the 5-franc piece being the only silver coin which is of legal tender for any amount, and all the smaller silver coins being mere tokens, so that, on setting the amount of silver 5-franc pieces against the amount of gold coin and bullion, the former must bear a very small proportion to the total of gold bullion and specie available for resuming cash payments; 2*ndly*, the further coinage of silver 5-franc pieces has been stopped; 3*rdly*, in the existing double standard the relative value of gold to silver is as 1 to 15½, whereas, at the existing market price of silver, say 56 pence an ounce, the relative value is 1 to 16·8392, so that if the double standard were to be perpetuated at the existing valuation of 1 to 15½, gold would be expelled from circulation in France, and the strain on the two mints in that country would be immense, in having to coin four 5-franc silver pieces for every 20-franc gold piece, and 20 five-franc silver pieces for every 100-franc gold piece which may be exported; the immense strain on the two mints would be similar to that in coining small silver and copper coins for the new German coinage, to which the numerous mints in Germany have proved unequal; 4*thly*, it seems out of

the question that France, with gold more than enough for resuming specie payments, should court the certainty of its exportation wholesale, by resuming specie payments with a double standard in face of the serious and still continuing fall in the price of silver; 5*thly*, the question has been all but settled in favor of a single gold standard by the French Government, and by a preponderance of French opinion (Appendix No. A paragraph 22).

81. Before quoting the several estimates of the amount of gold and silver coin in France, the note circulation of the Bank of France may be detailed :—

Number.			Denomination of Notes.	Value.			
25th January 1872.	25th January 1873.	25th January 1874.		25th January 1872.	25th January 1873.	25th January 1874.	25th January 1875.
(Three 000s omitted)			Francs.	Francs Millions.	Francs Millions.	Francs Millions.	Francs Millions.
(Seven or six Notes)			5,000	035	·035	·030	·030
802	775	719	1,000	802·149	775·412	719·297	822·297
424	427	404	500	212·009	213·677	202·156	215·961
12	7	5	200	2·412	1·367	·966	·819
7,100	8,060	8,845	100	710·030	805·971	884·485	969·808
5,288	6,137	5,493	50	264·405	306·845	274·656	320·525
10,429	4,457	1,142	25	260·721	111·437	28·559	4·754
10,089	26,839	31,423	20	201·777	536 783	628·463	299·723
...	21,327	18,725	5	.....	106·636	93·623	6·714
...	.....	.....	1	.....	...	...	...
1	1	1	Old models	·462	·456	·455	·452
34,145	68,030	66,757	.....	2,454·030	2,858·619	2,832·690	2641·052

The 5-franc notes were introduced in the year ending 25th January 1873, and the Paris correspondent of the *Economist*, writing on 28th August 1873, stated that "the Paris Mint is striking off silver 5-franc pieces in large "quantities, in order to permit the circulation (withdrawal) of the 5-franc "notes. The disappearance of the small notes will not be regretted, for, from "not being renewed sufficiently often, they are generally torn and almost "black with dirt and grease." The withdrawal was nearly completed by the end of 1874, and then, in December 1874, the mint began the coinage of 20-franc pieces to facilitate the withdrawal of the 20-franc notes, the circulation of which, and of the 25-franc notes, was considerably reduced by 25th January 1875. Before the suspension of specie payments, the note of smallest denomination was the 50-franc note.

82. From 1795, the year in which the decimal system of coinage was established in France, to the end of 1871, the amount of gold and silver coined was as follows:—

	Francs (Millions). (Three 000s omitted.)			Sterling (Millions). Three 000s omitted.)		
	Gold.	Silver.	Total.	Gold.	Silver.	Total.
				£	£	£
1792 to 1846	1,169·586	3,895·663	5,065·249	46·78	155·83	202·61
1847 to 1861	4,542·325	758·125	5,300·450	181·69	30·33	212·02
1862 to 1871	2,103·693	468·499	2,572·192	84·15	18·74	102·89
	6,646·018	1,226 624	7,872·642	265·84	49·07	314·91
Total ...	7,815·604	5,122·287	12,937·891	312·62	204·90	517·52
Withdrawn	71·083	236·150	307·233	2·84	9·45	12·29
Remaining	7,744·521	4,886·137	12,630·658	309·78	195·45	505·23

The Paris correspondent of the *Economist*, from whose letter, dated 6th March 1873, the total coinage from 1795 has been taken, observed of the gross total

less withdrawals, that "the value of the coin current thus amounts, on "paper, to 12,630,657,996 francs, but the effective amount in circulation in the "country at present, probably does not exceed one-third of that sum" *viz.*, 4,221·219 million francs, or 168·85 millions sterling.

83. Throughout the period from 1795 to 1871 the double standard prevailed; down to 1847, or the year preceding the gold discovery in California, gold was the dearer metal, and accordingly the coinage of silver preponderated. After 1847 silver began to rise in value, and the drain of silver for the East commenced; and from that time the coinage of gold preponderated. In the period from 1862 to 1871, the silver coinage amounted to 468·499 millions of francs; but of this amount 425·252 millions of francs were coined in the years 1866 to 1870, and Colonel Sykes, in writing on the statistics of France for 1866 observed: "The coinage in silver of $\frac{9}{10}$ths purity has been restrained, "but that of $\frac{835}{1000}$ths amounts to 34,248,000 (out of a total silver coinage, that year, of 44·821 million) francs, and is intended to amount "to 239 millions, which will be amply sufficient for all money changing. The silver coinage from 1866 to 1871 amounted to 449 million francs, of which, in the proportion that obtained in 1866 between the token coinage, and the full weight silver coin, the former will have amounted to 346 million francs, or 13·84 millions sterling.

84. In his Minute on a gold currency for India, dated 25th December 1859, Mr. Wilson observed respecting the over-valuation of silver in the double standard of France: "Since the gold discoveries, the price of gold has fallen "somewhat below the fixed rates, and in consequence, since 1850, a sum "equal to one hundred and thirty millions sterling of gold has been coined at the "French Mint, and a corresponding amount of silver has been exported. * * "Indeed, it is chiefly the fact that a large portion of the silver coin now in "circulation in France has become considerably reduced below their full value "by wear that has prevented their being exported." The gold coined in the French Mint from 1850 to 1858 amounted to 128·121 millions, and from 1859 to 1865, when all the silver coin (except 5-franc pieces) was demonetised, amounted to 83·583 millions sterling; but, for the reason stated by Mr. Wilson, nothing like an equal amount of silver, the coin being worn-out, could have been exported against this gold coinage. Still, there was some exportation of silver, for the drain for the East was then great, and the pressure caused by the exportation led to the Latin Monetary Convention of 1865. On the whole, a total exportation of 150 millions sterling of French silver coin may be assumed. In the Commercial History and Review for 1867 it was observed that "in France the silver currency has been, in a great degree, transferred to "India, and has been replaced by gold and by a large proportion of bank-"notes—both entirely new facts in the history of the French circulating "medium. The same thing has happened, but on a smaller scale, in "Germany."

85. Deducting 150 millions sterling from the total silver coinage of 195·45 millions sterling from 1792 to 1871, there remain 45·45 millions, equal to 1,136 millions francs, to the end of 1871. In 1872 the coinage of silver was inconsiderable; in 1873 a large number of 5-franc pieces (paragraph 81) were struck, for the withdrawal of five-franc notes, and as the amount of those notes has been reduced since 1873 by 100 millions of francs, that amount may be added to the 1,136 millions francs of silver coinage at the end of 1871, thereby raising the total to 1,230 millions.

86. In December 1873, M. Bonnet stated (Appendix A, paragraph 29) that in 1870, the silver circulating in the country amounted to 1,000 or 1,200 millions francs; and in the same month M. Magne, Minister of Finance, stated "that it would be a madness, at this moment, to withdraw from the circulation "1,500 millions of silver specie, which was playing so considerable a part in "the exchanges," that is, in the payment of the cheaper silver to Germany as part of the war indemnity. The total existing silver coinage in France may be assumed at M. Magne's figure of 1,500 millions of francs. M. Bonnet considered that 500 or 600 million francs would suffice for a silver token currency with a single gold standard, though, as quoted above, Colonel Sykes stated in

1868, that the intention was to limit the silver token coinage to 239 millions. Assuming a provision of 500 millions, 1,000 millions of francs, or 40 millions sterling in silver, would be set free by the adoption of a gold standard.

87. Thus, on France resuming specie payments, about 18 millions sterling in gold may be liberated, besides 40 millions sterling in silver through the inevitable demonetisation, then, of that metal.

88. Excepting a brief period from November 1858 to a date in 1859, during which specie payments were resumed, the inconvertible paper currency of Austria dates from a past generation. On 30th June 1866 the debt not bearing interest, exclusive of the Lombardo-Venetian debt, since transferred to Italy, amounted to 1,750·688 millions florins (1 florin = 2 shillings), and the debt bearing interest to 748·035 millions, total 2498·723 millions, besides 253·252 millions of floating debt. Writing in 1868, M. Seyd stated the amount of the State notes at "some 300 millions florins and more (the exact "total is not known to the public), and this issue is still on the increase." At the Congress of Economists in Vienna in April 1875, the amount was stated at 347 millions of gulden or florins worth of legal tender notes. Besides these the National Bank of Vienna has issued inconvertible notes. For a long time the amount of its inconvertible paper was limited, but in May 1873, in the great financial crisis in Vienna, the limitation was suspended or waived. The period of suspension expired in October 1874, and the limit prescribed by the Austrian Bank Act was restored, *viz.*, that the issue against which no bullion is required shall not exceed 20 millions sterling. The figures, seven months after the suspension of the limit, and subsequently, have been—

(National Bank.)	19th November 1873. £	11th November 1874. £	23rd June 1875. £
Circulation ...	36·720	31·271	28·667
Deposits (not stated).			
Coin and bullion ...	14·454	14·370	13·810
Excess over bullion	22·266	16·901	14·857

The amount of inconvertible paper money has been reduced, which is the same thing as if coin and bullion had been increased towards a resumption of specie payments.

89. The £34·7 millions of State notes, and the £28·667 millions of National Bank notes, give a total of £63·367 millions of paper money. As the State notes were issued for meeting successive yearly deficits, of necessity they greatly exceed the actual requirement of paper money; merely deducting, however, twelve per cent. as about the premium on gold, there remain 55¾ or say 56 millions sterling as the actual circulation. Among a people who for more than one generation have been habituated to inconvertible paper money, a proportion of one-fourth coin and three-fourths paper may not be unreasonable (see paragraph 111). This would give 14 millions in specie and 42 millions in notes; adding a reserve of specie at two-fifths of the amount of notes, *viz.*, 17 millions, the aggregate becomes 31 millions specie and 42 millions in notes, total 73 millions sterling, against the National Bank's actual of 42·477 millions of circulation and reserve on 23rd June 1875. Towards this specie reserve of 31 millions, the Bank had 13·810 millions sterling on 23rd June, so that about 17 millions sterling of gold and silver would be required for resuming cash payments; this might be an outside estimate, for Austria must have some reserve of coin in her own treasuries, apart from the coin reserve of the National Bank, and a hoard of the precious metals which always accumulates during the prevalance of an inconvertible paper currency, must emerge from its hiding place, whenever specie payments are resumed.

90. In Appendix A. means are provided for judging whether Austria will resume payments in gold or in silver. In any case she will require the abovementioned 17 millions sterling in the metal in which she resumes payment. Should a single standard of silver be adopted, a portion, nay, the whole, of the existing gold reserve in the National Bank will be set

free; but from what is stated in paragraph 53 of Appendix No. A, there is a strong probability that, for weighty reasons, Austria must adopt a gold standard; and the National Bank has been acting on this latter view; for whereas, during the meeting of the Congress of Economists in Vienna, in April 1875, the Bank had 55 millions florins in gold and 90 millions in silver, out of a total metallic reserve of 145 millions florins, or £14·5 millions sterling, the Vienna correspondent of the *Economist*, writing on 29th June 1875, stated that the Austrian National Bank possessed "one-half of its cash in "gold coins, amongst which there are 71½ millions gulden (florins) worth of "Napoleons." Now, on 23rd June, the cash in the Bank amounted to £13·810 millions, so that the amounts of gold and silver in the reserve in the two periods were (in millions)—

	Gold florins.	Silver florins.	Total florins.	£
April 1875 ...	55	90	145	14·5
23rd June „ ...	71·5	66·5	138	13·819
7th July „ ...	...	...	...	13·797

In a brief period of two months the proportions have greatly altered, gold decidedly preponderating. The reduction in total reserve, on 7th July, compared with 23rd June, may mean nothing more than the diminished value at which the silver bullion in the reserve has been returned owing to the progressive fall in the price of silver.

91. If no silver coin were circulating, or being hoarded in Austria, the 66·5 millions florins of silver reserve would, on the adoption of a gold currency, be required for the subsidiary coinage, but on the presumption, which seems not unreasonable, that the silver coin which is hoarded or is in circulation, will suffice for the subsidiary coinage, the whole of the 66½ millions of florins in silver would need to be replaced by gold, at the same time, setting the silver free for disposal in other countries. Hence, it appears that if specie payments be resumed in silver, Austria will require 17 millions sterling of additional supply in silver, *plus* 7 millions sterling in exchange for gold, total 24 millions silver, which would set free 7 millions in gold. If cash payments be resumed in gold, there will be required 24 millions in gold, and 7 millions sterling in silver would be set free.

92. The Kingdom of Italy was constituted in March 1861. A writer in the *Times* of 4th September 1874, reviewing the finances of Italy from 1861 to 1873, observed: "The actual financial condition of Italy, examined without refer- "ence to the past, presents a sufficiently gloomy aspect. She has an annual "deficit which has never been less than 200 millions francs; a further debt "which, including all liabilities, has increased in the course of thirteen years "from 2,439 millions francs to 9,757 millions; a forced paper currency of 840 "millions francs, together with an entire disappearance of gold and silver; "exchange ranging between 8 and 16 per cent., and at times even 20 per cent., "against the country, and imports to a large amount in excess of the value of "Italian productions exported." The income, expenditure, and annual deficit at various periods have been as follows, according to the *Times*:—

	1861.	1862.	1865.	1867.	1870.	1871.	1872.	1873.
	Francs, Millions	Francs, Millions	Francs, Millions	Francs, Millions	Francs, Millions	Francs, Millions	Francs, Millions	Francs, Millions
Expenditure ...	812 27	921 21	1066 46	1117 59	1021 93	1277 78	1366 98	1384 62
Income ...	458 32	471 24	637 18	784 25	800 65	1016	1158 33	1180 65
Deficit ...	353 95	449 78	429 28	333 34	221 28	261 78	208 64	203 97

The considerable increase of income and expenditure in 1867 was from the acquisition of Venetian territory, and in 1871 from the acquisition of the Roman provinces. With the first of these acquisitions, and a general improvement of income, the deficit was reduced from 429 millions francs in 1865 to 221 millions

in 1870. With the new acquisition in 1871 there was an increase of deficit, but eventually in 1873 the deficit was reduced to 204 millions francs, equal to 8·16 millions sterling. The *Statesman's Year Book* for 1875 does not give later figures, but it is remarked that "the budget estimates of 1874 and 1875 differred but slightly from those of 1873."

93. The statement that the inconvertible paper currency is at a discount ranging between 8 and 16, and sometimes 20 per cent., is corroborated by a writer in the *Economist* of 7th February 1874, who mentions Italy "with her paper currency depreciated to the amount of 15 per cent." There is no prospect of a surplus wherewith to reduce the amount of inconvertible paper, and while the paper is at a discount of 15 per cent. it might be considered inexpedient to fund any portion of it, or to borrow money for the resumption of specie payments; the more so as the annually recurring deficits compel annual borrowings for the more immediate necessities of the Kingdom, with a steady, disquieting increase of the charge for interest.

94. The means of judging whether Italy will resume specie payments in gold or in silver are set forth in Appendix A, paragraphs 21 to 30. On the whole, it appears with regard to Italy,—

1*st*,—That she has an inconvertible paper currency of 840 millions francs, which is depreciated about 15 per cent., making it equal at full value to 714 millions, or £28·56 millions:

2*nd*,—That towards this amount the National Bank of Italy had on 31st December 1873 60 millions francs in silver, and the Italian Government at least as much more; total 120 millions, equal to 4·8 millions sterling:

3*rd*,—That hence, at the outside, on resuming specie payments in silver, Italy might require 594 or 600 millions of francs worth, or 24 millions sterling; but that the period for resuming specie payments is beyond the reach of estimate at present, and there are strong considerations for resuming payment in gold.

95. Respecting the inconvertible paper currency of Russia, and the probability of her resuming specie payments, there is not much reliable information. In "Fenn on the Funds," tenth edition, 1869, a remark occurs: "It is not always possible to obtain a reliable statement of the true position of "the finances of this Empire, as only such information is published as the Gov- "ernment may think fit to sanction." The *Statesman's Year Book* states that "the budget (of Russia) invariably either shows a surplus or an even balance "between receipts and disbursements, while the accounts of actual revenue "and expenditure always exhibit deficits, not unfrequently to a very large "amount. In the following table the totals are given in pounds sterling of the "actual revenue and expenditure for each of the five years from 1868 to 1872:—

	1868.	1869.	1870.	1871.	1872.	1873.	1874 (Estimate).
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
Revenue	60·506	65·357	68·651	70·154	71·915	73·907	77·122
Expenditure	63·040	66·971	69 354	71·404	73·934	73·903	76·669
Deficit	2·534	1·614	·703	1·250	2·019	...	(In 1875)
Foreign loans... ...	...	11·110	12·000	12·000	15·000	15·000	15·000

Besides the foreign loans, there are internal loans, and, in case of necessity, additional issues of inconvertible paper. The foreign loans are stated to be principally for the construction of railways. On 1st January 1871 the debt amounted to 133·350 millions sterling, which the 57 millions sterling of foreign loans raised from 1871 to 1875 will have increased to 190·350 millions, exclusive of any internal loans raised in those years. Omitting certain transfer items from both sides of the account, the revenue of Russia is, perhaps, not more than one-third larger than the revenue of British India, while her debt, at its incomplete amount, is 58 per cent. greater than the Indian debt.

96. Exclusive of the foregoing debt, are, 1st, the amount of railway capital raised by private companies on which the Government has guaranteed interest, and the amount of inconvertible paper currency. The gross interest guaranteed amounted in 1869 to £2·448 millions, and in 1872 to £4·144 millions, while the net amount payable under the guarantee was £·586 millions in 1869, and £2·085 millions in 1872.

97. In "Fenn on the Funds," edition, 1869, it is stated that "notwithstanding the measures taken to check the increase of paper curency in Russia, "the circulation of notes continues to extend. The guarantee, consisting "of the capital of the State Bank, together with the bullion held by the "treasury and the State Bank, bears so small a ratio to the amount "guaranteed, that a depreciation in the value of the note is the result. This "state of things has existed for a long period, and the premium on coin has "varied very much from time to time. During the European war of 1814, the "premium was as much as 320 per cent., owing to the amount of paper issued "to meet the expenditure of the war. The premium was, however, greatly "reduced in after years, and in 1825 it had fallen to about 200 per cent. In "1843, forced currency was given to the bank note, and an entire new issue "was made, the old notes being withdrawn from circulation. The premium on "coin in the empire, at present, is about 15 per cent."

98. The note circulation at various periods has been—

	1861.	1865. (1st January.)	1867. (1st January.)	1870. (December.)
	Millions.	Millions.	Millions.	Millions.
Roubles	679·878	595·704	590·499	750·
£ at 7 roubles to the £	97·125	85·101	84·357	107·143

The *Statesman's Year Book* for 1875, in simply repeating, from previous issues the information for the year 1870, states that the rate of discount on the paper ranges from 10 to 15 per cent., and that "the issue of paper money continues "at an increasing rate, the note circulation having more than doubled in ten years. In December 1873, M. Wolowski, in advocating a double standard for France, observed:—"If Russia was preparing for a loan of two milliards (of "francs)—80 millions sterling—to enable her to return to a metallic circulation, "she would employ silver." But eighty millions sterling would be as much as the entire amount of foreign loans raised by Russia from 1869 to 1875, and it would raise her debt (exclusive of internal loans since 1870) to 278·350 millions sterling, or an amount more than double the Indian debt, while the Russian revenue does not exceed Indian revenue by more than one-third, and Russian finance shews a yearly deficit. On these considerations, there does not appear to be ground for expecting an early resumption of specie payments in that empire.

99. Or if M. Wolowski's informant overstated the amount to be borrowed, and if, by borrowing, the inconvertible paper were to be cut down to three-fourths the amount in 1870, that is to 80 millions sterling, only a portion of that amount would need to be provided in silver. Perhaps a proportion of one-half for the metallic basis of the circulation would be too high among a people who have been habituated from the last century to a paper currency (see paragraph 111). In that proportion the gross requirement of silver would be 40 millions. Against this must be set the existing treasure which, as mentioned in "Fenn on the Funds," is reserved against the note circulation in the fortress of St. Petersburg, and in all the banks which have been associated as a State Bank for the convertibility of the note, and whose capital amounts to nearly 14 millions sterling. The exportation of silver, too, has for a long time been prohibited; and though evasion of a prohibitory law of this kind must be expected, yet on the other side must be set the practice of hoarding which prevails with an inconvertible paper currency. On resumption of specie payments, considerable hoards of silver in the country will no doubt be restored to circulation. On all these considerations it would seem that the silver required for resuming specie payments will be overestimated if assumed at 30 millions

sterling. In this reckoning, the 10 or 15 per cent. (Mr. Seyd in 1867 stated it at 12½ to 25 per cent.) discount on the note circulation has not been taken off the 750 million roubles which were circulating in 1870, as the circulation may have increased in the four following years.

100. The probability of a resumption of specie payments by Spain is too remote to merit consideration. The countries which have begun, or are preparing for a change from a silver currency to a single gold standard, are Germany, the Scandinavian Kingdoms, Holland, Belgium, and Switzerland.

101. There have been two official estimates of the old coinage of the several States of the German Empire which has to be replaced by the new coinage; the earlier of these appeared as an appendix to the new Coinage Bill in the beginning of 1873, and a summary of it was given in the *Economist*, dated 8th March 1873. The later account, which brought the information respecting the new coinage down to the end of 1873, and gave an amended statement of the amount of the old coinage in circulation, was published *in extenso* in the *Economist* of 13th June 1874. In the later account the entire issues of the several German States to the end of 1873, after deducting withdrawals by the mints, were detailed. The results are as follows:—

	Appendix to Coinage Bill.		Amended account.			
	Coinages of mints of various States to end of 1871.		Entire issue of several German States to end of 1873 after deducting withdrawals.		Estimated requirements.	
	Thalers. Millions.	£ Millions.	Thalers. (Full amounts).	£ 36⅔ thalers = £1	Reichsmarks Millions.	£ Millions.
Gold coins	179·546	26·932	176,981,437	26,547,216	1,200	60
Silver coins.						
Thalers, 1 and 2 thalers ...	...	...	432,817,596	64,922,640	(5 mark pieces) 50	2·5
„ fractions ...	...	...	62,990,223	9,448,534	(1 mark) 150	7·5
Florins, 1 and 2 florins and upwards ...	...	...	25,205,033	3,780,755		
„ fractions ...	...	...	43,059,326	6,458,899		
	626·800	94.020	564,072,178	84,610,828		...
Hanse Towns ...	9·145	1·372	8,208,399	1,231,260	In	above.
	635·945	95·392	572,280,577	85,842,088	200	10
Small silver coins. Thalers ...	—	...	15,822,016	2,373,302	*(Fractions) 200	10
Florins ...	...	...	10,543,993	1,581,596		
Hanse Towns...	In	above	921,456	138,218		
	635·945	95·392	27,287,465	4,093,119	Copper 25	1·25
Copper coins ...	In	above	3,653,483	548,022	(Nickel) 75	3 75
Grand Total ...	815·491	122·324	780,202,962	117,030,445	1,700	85

102. The following remarks were subjoined to the amended statement of May 1874, which appeared in the *Deutsches Handelsblatt* of Berlin:—

1.—The statement shows the coins which might be in existence, without abatement of the numbers melted, exported, and lost.

2.—Of the older German gold coinages only an inconsiderable amount remained in existence at the close of 1873, with the exception of a not very large sum of Prussian Fredericks d'Or; nearly all were melted down in the course of time. In accordance with a notice of the Imperial Chancellor, dated 6th December 1873, the old gold coins ceased to be legal tender from 1st April 1874, and ceased to be exchangeable at the Government Treasuries from 30th June 1874, so that they may be considered as withdrawn, reducing the amount of possible outstanding circulation of old German coinages to—

	Thalers.	£
Full weight silver coins ...	572,280,577	85,842,088
Small silver and copper coins ...	30,940,948	4,641,141
	603,221,525	90,483,222

3.—It is not probable that any of the German silver coins which still existed in December 1871, and which were adapted to the new monetary system by the tariff contained in the law of 5th December 1871, have since been melted down for private use, as to do so would be a clear loss. If the reduction which has thus taken place, down to the year 1871, is taken at one-quarter of the original issues, the circulation at the end of December 1871 may be estimated at about 450 million thalers (about 67,500,000*l.*) to which have to be added the Austrian thalers and florins at that time circulating in Germany. The Austrian florins have, as is well known, since then disappeared from Germany, but Austrian thalers to the amount of 20 or 30 millions (3 to 4½ millions sterling) may perhaps still be in Germany.

103. The old gold coinage of Germany dates from before 1857; and Mr. Seyd observed in 1867 that silver was then "the great staple of the "German coinage," it standing to reason that not much gold would circulate in a country in which silver coin was legal tender. It further appears from the remarks in the preceding paragraph that the actual circulation (namely that in silver) which had to be replaced, was 67½ millions of German and 3 to 4½ millions of Austrian coin, total 70½ to 72 millions. The estimate of requirements provides for 60 millions sterling in gold, and 20 millions sterling in silver, total 80 millions. This will liberate 52 millions of silver currency. In addition, the German Government received 9½ millions sterling of the war indemnity, from France, in silver, making a gross total of 62½ millions sterling of silver, for the disposal of which the German Government has to provide.

104. The paper currency of Germany consisted of Government notes issued by the several States, and of notes issued by banks. Imperial notes have been substituted for the former; the issue is limited to the proportion of 3 marks per head of population, or about 6 millions sterling, "which "corresponds closely with the estimated amount of issues to be superseded. "The paper money is to be of low denominations from 5 marks to 50 marks." This project was passed into law in April 1874.

105. The circulation of notes of the various banks amounted on 31st July 1874 to £58,938,610, of which one-third was backed by coin and bullion, leaving £39,292 millions not so secured. Of the total circulation, 178 millions of thalers, or 26·7 millions sterling were in notes of less than 100 marks, and it was estimated that, of these, 78 millions, in notes of 20 to 25 thalers—could be absorbed in the new notes of no smaller denomination than 100 marks, to which the banks are restricted by the new law passed on 30th January 1875. The remaining 100 millions thalers (15 millions sterling) of those small notes had therefore to be withdrawn by the banks. By the new law of 30th January 1875 the amount of their note circulation, not backed by coin or bullion, is limited to 385 millions of marks, equal to 19·5 millions sterling. The account then stands thus, *viz.*:—

	£	£
Total note circulation on 31st July 1874 ...	...	58,938,610
Notes issuable against an amount of bullion and coin, equal to one-third of the preceding item, which amount at least the banks were bound to have held on 31st July 1874... ...	19,646,203	
Notes issuable without being backed by coin or bullion (385 million marks)	19,750,000	
		39,396,203
Reduction ...		19,542,407
New metallic currency to be provided (para. 101) in excess of old coin in circulation, *viz.*, excess of 80 millions over 67½ millions ...		12,500,000
Net reduction of metallic and paper money		7,042,407

so that the requirement appears on the surface to have been short estimated by seven millions sterling, in the account stated in paragraph 101.

106. But this result is obtained only by assuming, in the calculation in the preceding paragraph, that the Banks must hold in coin and bullion one-third of the amount of their note circulation; whereas the German Bank Act of

30th January 1875 provides that a portion of this reserve may be held in the State notes of the Empire. The amount of those notes is limited to six millions sterling; and probably three millions may be held in the reserves of banks, displacing a corresponding amount of metal. On that assumption the amount of requirement of gold has been short estimated in the account in paragraph 101, by seven *minus* three, or by four millions, thus raising the total requirement to 64 millions of gold, while the silver to be liberated from the currency (paragraph 103) amounts to 62½ millions sterling.

107. The Vienna correspondent of the *Economist*, who keeps that journal informed of events in Austria and Germany, writing on 29th June 1875, stated that "up to the 5th June there were ready coined—

	Ready coined up to 5th June 1875.		Estimated requirement per para. 101.	
	Value.			
	Marks.	£ Millions.	Marks. Millions.	£ Millions.
Gold double crowns ...	885,539,460			
„ crowns ...	258,870,750			
	1,144,410,211	57·221	1,200	60
Silver pieces ...	99,765,112	4·988	400	20
Nickel coins ...	11,312,279	·566	75	3·75
Copper „ ...	4,163,404	·208	25	1·25
	1,259,651,006	62·983	1,700	85·00

"Besides these measures, the German Government is retaining its new gold "coins as much as possible, and only gives out new money when it withdraws "old silver thalers in exchange for it."

108. Owing to a promature issue of the new gold coinage, before withdrawal of the old silver currency, a portion of the former, not held by banks, which had got into circulation, was exported. The Vienna correspondent of the *Economist* in the letter above quoted, and in a passage following the above quotation, stated :—"One of the cleverest money-dealers in Frankfort "calculates that from 300 to 400 millions of marks worth in gold (15 to 20 "millions sterling) must be put on the account of England, France, Belgium, "Holland, and German gold manufactories, as having been exported out of "the country or melted to bullion." It is not clear from the letter whether the 57·221 millions of gold "ready coined" on 5th June 1875 was exclusive of these 15 or 20 millions. If exclusive, then the requirement for gold coinage, as estimated in paragraph 106 (*viz.*, 64 millions), had been nearly met (*viz.*, 57 millions) on 5th June 1875; if inclusive, still, the gold that was exported as a bullion operation can be got back to Germany by selling some of the large amount of bills, received as war indemnity, which the German Government still holds, or by the Prussian bank raising the rate of interest. In other words, the future annual production of gold need not be drawn upon, for any of the new German gold coinage up to the amount of 57 millions sterling. As the German Government has determined to introduce the new coinage throughout the Empire from 1st January 1876, it is probable that the 57 millions sterling ready coined are actually in hand.

109. On the other hand, of the gross amount of 62½ millions sterling of silver, which the new coinage and the war indemnity will throw on the hands of the German Government (paragraph 103), only one and a half million had been disposed of in April 1874 (paragraph 62), and this sum may have been increased to three millions by subsequent exportation of silver to India.

110. Mr. Strachey, Her Majesty's Secretary of Legation at Copenhagen, in his report, dated February 1873, on Scandinavian Currency Reform, observed : "I had hoped to be able to give in this report a statement of the extent of "the minting operations which, as far as Denmark is concerned, the adoption "of the gold standard will necessitate. But the data for an estimate have not "yet been collected, and I can only offer an approximate calculation. The "quantity of Danish silver circulating may be about 15 millions of dollars. "The National Bank has a nominal note circulation of 24 millions dollars, "of which 13½ millions are not covered by silver money or bullion. There "remains therefore a note circulation of 10½ million dollars, for which account "must be taken. It is further to be assumed that the 5 dollar-notes in

"circulation will be driven out by the new gold crown, with which coin they "correspond in value. On the whole, the Danish mint may have to coin gold "to the extent of from 2½ to 3 millions. The whole cost of the new coinage, "the loss on the purchase of gold included, will not exceed from £25,000 to "£30,000.

111. "Sweden, as was said above, has no silver currency worth taking "into consideration, the Danish silver having driven out the superior Swedish "coinage which, as soon as issued, is sent to Hamburgh to be melted. The "whole silver coinage of Norway, since the year 1816, is set at 3,880,000 specie "dollars. But that Kingdom has, for the most part, depended for the money "it required on the Danish Mint, which has coined at a cheaper rate than the "Mint of Norway. For exportation the Danish dollar has generally been "preferred, from its being better known than the Norwegian species. The "note circulation of Norway is about 9½ million specie dollars or £2,700,000. "The peasantry have a decided, almost a fanatical, preference for paper, and "there is little silver current except as small divisional money. The dollars "that exist are in good condition. The Danish Government is now preparing "to begin the minting operations required. The period of tolerance within "which the new currency must be in circulation has been extended from the "date originally proposed to the 1st of January 1875. The double (pro-"visional) standard will cease in 1878.

112. "It remains for me to mention certain changes in the constitution "of the National Bank of Denmark anticipatory of, or arising from, the "adoption of the gold standard. According to the original rules, the notes of "the Bank were funded partly on silver money and bars, partly on bills in "Hamburgh banco. * * The Bank may now substitute gold money and "bars for silver. That institution is also released from its liability to take or "demand at a fixed tariff all silver bars offered by private persons. Similar "permissions to fund in gold have been given to the Swedish and Norwegian "Banks. I do not know that they have availed themselves of their liberty "to any considerable extent. The Bank of Denmark, in view of the new "coinage, has laid in large quantities of gold."

113. From this account it appears that three millions sterling of gold were required for enabling the three Scandinavian Kingdoms to change from a silver to a gold standard by 1st January 1875, that this requirement will have been fully met by that date, and that the double (provisional) standard will cease in 1878, by which time about 1½ million sterling of silver will be set free from other countries.

114. The Royal Commission upon the monetary system in the Netherlands reported in March 1873 "that there will be great and serious difficulties "in the future from continuing the silver standard. The sum total of "standard silver coin now circulating in the mother country, that is excluding "Netherlands India, may be assumed at from 125 to 130 millions of florins "(*i. e.*, about 10 or 11 millions sterling). The double standard should be pro-"visionally and speedily adopted, at the relative value of 15½ to 1, and the "coinage of silver standard money should be limited, or should, provisionally, "be stopped. If Germany adopts a single gold standard, and France main-"tains her present paper currency, the Netherlands will be compelled to adopt "a single gold standard, the more so because it is possible that at some future "time the exclusive gold standard may likewise be adopted in the Latin "Monetary Union, for, in that Union, powerful influences are known to be "eagerly urging towards that end." The Royal Commissioners recommended a gold coinage of 900 fine. Writing in March 1875, Mr. Hendricks stated: "The Dutch have burdened themselves with a fresh load of £1,103,167 worth "of silver coined from 1st May to 30th September 1874, and in April 1875 "the Minister of Finance stated that the silver then circulating in Holland "amounted to 14¾ millions sterling."

115. On the whole, after allowing for a subsidiary silver coinage, the new gold coinage of Holland may require ten millions sterling of gold, which would set free for other countries ten millions sterling of silver. So far back as March 1873, the Paris correspondent of the *Economist* stated that "there is "reason to believe that not only Germany but Holland and other countries have "been collecting gold in preparation for the revolution in monetary standards "long foreseen." Hence it is probable that the greater part of the ten millions of gold has been already provided, while the 10 millions of silver have yet to be thrown on the markets of the world.

116. For Belgium an estimate of the probable requirement of gold is not available. Since 1832 Belgium had coined, until nearly the end of 1873, 232 millions francs in gold and 471 millions francs in silver. From 1866 to 1871, Belgium coined 7·9 millions sterling in silver, and in eight months of 1873, 2·54 millions sterling, total 10·44 millions, equal to 261 millions of francs. Her requirements of gold may be estimated at the same amount as for Holland, *viz.*, 10 millions, towards which she had coined in 1874, 2·437 millions. A net requirement of ·7 millions sterling may be assumed, which, when completed, will set free ten millions sterling of silver.

117. The annual demand for replacing wear and tear of coinage in the countries which have a gold currency depends on the amount of coin in circulation, and on the rate of wear and tear. The amount of gold coin in circulation, or which will be in circulation, on the adoption of a gold standard by the countries which are altering their standard from silver to gold, or on resumption of cash payments in gold, has been stated, in preceding remarks, for the United States, Germany, Holland, Belgium, and Austria. The amount of metallic circulation in Great Britain may now be considered, and with it the rate of increase of coinage required for the increasing volume of trade.

118. It will be useful to preface the evidence on this head by the following statement of the gold and silver imported into and exported from the United Kingdom, and of the amount of gold coinage less withdrawals, and of the coin exported—in each year from 1858, the information being taken from the annual statements of trade, and the statistical abstract, for the United Kingdom, and from tables published in the *Economist*, dated 31st August 1872.

Years.	COIN AND BULLION.						COINAGE.					
	Gold.			Silver.			Gold.			Silver.		
	Imports.	Exports	Net Imports.	Imports.	Exports.	Net.	Coinage less £598,000 a year (average of light coin withdrawn).	Net exports of British gold coin.	Annual addition to coinage in circulation.	Coinage.	Net export of British silver coin.	Remainder.
	£ Millions	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions. Exports.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions	£ Millions
1858 ..	22·793	12·567	10·226	6·700	7·063	·363	·653	·251	·382	·446	·246	·20
1859 ..	22·297	18·081	4·216 Exports.	14·772	17·605	2·833 Imports.	2·052	Net imports. ·311	2·363	·647	·033	·614
1860 ..	12·585	15·642	3·057	10·303	9·893	·410	2·523	Net exports 3·103	—·580	·218	·059	·15
Total ..	57·675	46 290	Imports. 11·385	31 775	34 561	Net exports 2·786	5·208	3·043	2 165	1 311	·338	·973
1861 ..	12·164	12 188	·026	6·588	9·574	Exports. 2 991	7·593	8·089	—·496	·209	·114	·09
1862 ..	19 004	10·012	8 892	11·753	13·315	1·562	7 238	3·470	3·768	·149	·002	·151
1863 ..	19·143	15·303	3·840	10·888	11·241	.353	6·010	4·751	1·259	·161	Net imports ·054	·215
Total ..	51·211	43 453	7 758	29·224	34·130	4 906	20 841	16·310	4 53	·519	·058	461
1864 ..	16·901	13·280	3·621	10·827	9·851	Imports. ·976	8·937	4·308	4·629	·535	·052	·483
1865 ..	14·486	8·493	5 993	6·970	6·599	·377	1·769	1·182	·587	·502	Net imports. ·015	7 15
1866 ..	23·510	12·742	10·768	10·777	8·897	4·880	4·473	Net imports ·047	4·525	·493	·035	·458
1867 ..	15 809	7·889	7·911	8·021	6·435	1·586	—·101	·813	·914	1·94	·018	·176
1868 ..	17·136	12·708	4·428	7·711	7·512	·199	1·055	Net exports. 2·301	— 1·246	·301	·059	·242
1869 ..	13·771	8·474	5·297	6·730	7·904	Exports. 1·174	6 774	·303	6·471	·076	·202	·626
1870 ..	18·807*	10·014	8·793	10·640	8·900	Imports. 1·740	1·715	·997	·718	·337	·207	Net imports ·130
Total ..	120·411	73·600	46 811	61 691	56·107	5 584	24·627	.8 231	16·396	2·438	·558	1·880
1871 ..	21 619	20·698	·921	16·522	13·062	3·460	9·322	4·845	4·477	·702	·144	·558
1872 ..	18·469	19 740	—1·280	11·140	10·587	·553	14·063	7·814	6·949	1·244	·225	1.019
1873 ..	20·611	19·071	1·540	12·989	9·830	3·159	2·787	3·075	—0·288	1·082	·19	·886
1874 ..	18 081	10·642	7·439	12 298	12·212	·086	·865	..	·864	·891		
Total ...	78·780	70·160	8·620	52·949	45·691	7·258	27·036	15·734	— 11·902	3·919		
Total from 1858 to 1871	250·916	184·041*	66·875	139·212	137·860	1·352	59·908	32·429	27·500	4 970		
Total to 1874	308·077	233·503	74·574	175 639	170·489	5·150	78·514	43·818	35·100	8·187		

* Total in *Economist* £183·141 from the amount for 1861 having been stated at £11·238 instead of £12·138. From the same cause, and from other trifling variations, the total net import of gold was stated by the *Economist* at £67·770 millions.

119. The first remark suggested by this table is in the unreliableness of the amounts of imports and exports of gold and silver which are entered in the returns of the Board of Trade: the inaccuracy is not peculiar to the Board's returns, but occurs generally in all returns of shipments of specie and bullion. On this head observations have been made from time to time as follows:—

1*st.*—In the History of Prices, vol. 6, page 710, Mr. Newmarch remarked: "It is not supposed that this return contains "a full and accurate statement of the exports of bullion. "Exports of bullion, it is quite well known, are prevented by "a multitude of causes from appearing on the books of the "Custom House. Still the figures are of value, as indicating "the deviation and fluctuations of the export trade in bullion."

2*nd.*—In the Commercial History and Review for 1865, the *Economist* observed: "The gazette returns of bullion from which the "tables of the Board of Trade are made up, are to be used "with caution."

3*rd.*—The *Economist* on 31st August 1872 remarked: "The bullion "dealers, it is said, have ways and means of keeping their "operations secret when they wish, and the official statistics "must necessarily err. But the answer to this is, that the "people connected with the bullion trade only wish secrecy "occasionally, and that there is no reason to suppose only one "set of operations,—*viz.*, the exports—would be concealed, and "consequently one error would tend to correct another, speci-"ally over a long series of years. In any case concealment of "anything more than a fractional part of such large operations "appears incredible."

4*th.*—On 6th March 1873 the Paris correspondent of the *Economist* wrote: "It is generally admitted that the Customs tables of "the imports and exports of gold and silver represent very "imperfectly the real movement of the precious metals. A "prosecution which has just taken place at the suit of the "Eastern Railway Company, shows how untrustworthy are "the declarations of value made by exporters. The Bank of "Exchange and Commission delivered to that Company on "the 4th and 5th October last, for conveyance to Vienna six "boxes of gold in specie, each declared to contain 80,000 francs. "The Railway by chance had one of the boxes opened for "verification, and the result was that they were found to con-"tain each five bags of 20,000 francs, or a difference of 120,000 "francs. The Bank has in consequence been condemned to pay "the difference in the cost of carriage, with damages to be paid "after estimation; and the Court, to ascertain to what extent "these frauds have been carried on, has also appointed an "*expert* to examine the books of the Bank and compare the "amount of previous remittances made, with the value of "them, as declared to the Railway Companies."

5*th.*—The preceding caution, so frequently repeated, against an implicit acceptance of Customs returns of trade in gold and silver, is confirmed by the figures in the above table; thus,—

Period.	Gold.			Silver.		
	Net imports.	Net addition to coinage.	Remainder for arts.	Net imports.	Net addition to coinage.	Remainder for arts.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
1858 to 1863 ...	19 143	6 696	12 447	—7 692	+1 434	—9 126
1864 to 1870 ...	46 811	16 396	30 415	+5 584	1 880 (Three years)	+3 704
1871 to 1874 ...	8 620	11 902	—3 282	+7 258	2 463	+4 795
	74 574	34 994	39 580	5 150	5 777	627

The *Economist*, on 31st August 1872, accepting the customs returns as sufficiently accurate for practical purposes, held that of the imports of gold shown in those returns, whatever was not absorbed in net additions to the coinage, or is not shown in the customs returns to have been exported, must be held to have been consumed in the arts. On this assumption, nearly 40 millions' sterling of gold, less certain minor abatements, but only £1·662 millions of silver, were consumed in the arts from 1858 to 1874, which is absurd; also from 1858 to 1863 twelve millions of gold were consumed in the arts, but not a shilling's worth of silver; on the contrary, silver plate was melted down and exported to an amount ranging between 7½ and 9 millions sterling.

120. Mr. Jevons, in a paper read before the Statistical Society on 17th November 1868, on the question of the metallic currency of the United Kingdom, and an international coinage, estimated,—and set forth the data on which he estimated,—the amount of metallic currency then in circulation in the United Kingdom. Having arrived at the following figures, *viz*,:—

	£ Millions.	£ Millions.	£ Millions.	£ Millions.
Gold—Sovereigns ...	68·0			
½ „ ...	12·	80		
Silver coin ...	14·			
Copper „ ...	1·	15		
		—	95	
Gold bullion in the Bank of England ...	...	...	15	110
	—	—	—	—

Mr. Jevons noticed a previous estimate by Mr. Newmarch, who, as the result of detailed investigations set forth in his paper, was "disposed to think that "if the amount of the gold circulation was 46 millions in 1844, we may "suppose it to be, say, *seventy millions* in 1856, without any extreme departure "from the probabilities of the case, when they are carefully examined. And "considering the general tenor of former estimates of the quantity of gold coin "in circulation in the United Kingdom, it does not appear that a supposition of "even *seventy-five millions sterling*, as the quantity at the close of 1856, would "be unduly exaggerated."

Mr. Jevons preferred his own method of investigation to that of Mr. Newmarch. He observed: "Mr. Newmarch has employed, indeed, "the old method of estimation, which consists in assuming, on neces- "sarily feeble evidence, a certain amount of coin as in use in a given "year, adding the issues of new coin from the mint or the Bank, "subtracting the known amount of light coin withdrawn, and also the "amount exported, according to the most probable estimate." Continuing Mr. Newmarch's estimate on his own plan, that is, starting from the year 1856 with Mr. Newmarch's estimated circulation of 75 millions, and adding and subtracting the new coinage and the net exports down to 1866, Mr. Jevons arrived, on Mr. Newmarch's basis, at 94 millions as the gold circulation in 1866, against his own estimate of 80 millions. Mr. Jevons observed: "The above exceeds my estimate by at least 14 millions sterling; "but a considerable part of this discrepancy may be fairly attributed to the "incomplete registration of exports of gold coin at the Custom house. It is "thus apparent that if we took Mr. Newmarch's lower estimate of 70 "millions, there would remain but little discrepancy between that and my "estimate of 80 millions. But if even my own estimate of 80 millions is above "the truth, owing to the extensive practice of melting new coin, in the same "degree we must consider that Mr. Newmarch's estimate of 70 millions is in "excess of the truth. If any one could estimate the circulation correctly in the "old manner, it would be Mr. Newmarch; but there are such inherent inaccu- "racies in all accounts of the export of coin, that we can rely upon no calculation "in which they play an important part, and I have satisfied myself, by work- "ing from my own maximum estimate of 80 millions backwards to the year "1852, that there is from 20 to 30 millions of the coinage which is not to be "accounted for by the Custom house returns, and which must have disappeared "by melting or secret exportation during that interval."

121. Unmindful of this condemnation by Mr. Jevons of the method pursued by Mr. Newmarch, and of the demonstration by the former, that by deducting from the gross coinage of 1852 to 1866, the net export of British gold coin in that period, some 20 to 30 millions of coinage, that is, an annual average of 1⅞ to 2 millions a year, cannot be accounted for, the *Economist*, on 31st August 1872, estimated the increase of gold coinage in the United Kingdom from 1858 to 1871 precisely on Mr. Newmarch's method. The *Economist* prefaced the investigation with the following statement:—

			£ Millions.
Net imports of gold coin and bullion, British and Foreign, from 1858 to 1871			68
Net imports of foreign coin	£ 65·823 millions.		
„ „ of bullion	£ 34·376 „		
	100·199 „		
Less net exports of British gold coin ...	32·429 „		67·770

These and other figures of the *Economist* will be found in the table in paragraph 118. That journal, commenting on this statement, observed:—"The actual gold coinage in the United Kingdom since 1858 has been £68·370 millions, and the actual coinage out of new supplies of gold, that is, deducting the recoinage, has been less. According to information kindly supplied to us by the authorities of the Bank, the light coin withdrawn in the period in question has been £8·365 millions, so that the total coinage, out of the new supplies of £100·199 millions, has been almost exactly 60 millions. In other words about 40 millions of the gold which has arrived since 1858 has not entered the coinage. What has become of this 40 millions? There is no foreign gold coin in circulation, and bullion does not circulate, nor is there any hoarding in this country nor can the trade keep unused so immense a sum as 40 millions sterling." As this amount could not be in the country, the *Economist* arrived at the conclusion that it had, for the most part been, used up. Thus—

Net imports of foreign gold as above			£100 millions.
	£		
Increase of foreign coin in Bank of England in 1871 over 1858	8	millions.	
Foreign coin taken abroad by travellers	4	„	
Used up in arts and manufactures about 2 millions sterling a year for 14 years from 1858 to 1871	28	„	
Added to the gold circulation of the United Kingdom, from 1858 to 1871, (£27·569 millions;—table in para. 118) ...	28	„	
	68		
Coined and exported abroad	32		£100 millions.

122. In Mr. Newmarch's paper in the History of Prices, which Mr. Jevons noticed in a precedingh extract (paragraph 120) the former had stated:—"It is believed by very competent authorities that the 12 millions sterling "of light gold withdrawn from circulation in the period 1840 to 1844 was about "*one-third* of the total quantity of gold coin in circulation with the public in "the United Kingdom. The total quantity, therefore, would be 36 *millions sterling*," and on this basis he estimated the coin in circulation at close of 1856 at 69 millions. "I am inclined to think, however, that the amount of "the gold coin circulation of the United Kingdom in 1844 was considerably "more than the 36 millions assumed," because, on an average of 4 years from 1838 to 1841 (during which the public as much as possible avoided tendering light sovereigns at the Bank), the proportion of light sovereigns tendered averaged about 25 per cent. "And as the quantity of light gold coin withdrawn "was 12 millions, the total gold circulation would be, apparently, 48 millions." On this basis Mr. Newmarch estimated the coinage in 1856 at 85 millions, but making certain abatements arrived at 70 millions, while Mr. Jevons, it has been seen, arrived by a different method of induction at a circulation of

80 millions in 1866, thus giving the following results :—

	Mr. Newmarch. 1856. 1st estimate. £ Millions.	Mr. Newmarch. 1856. 2nd estimate. £ Millions.	Mr. Jevons. 1866. £ Millions.	Mr. Jevons. Increase since 1856. £ Millions.
Estimated gold circulation ...	69	70	80	10
Previously in circulation in 1844	36	46	36 / 46	
Increase ...	33	24	44 / 34	10
Average annual increase ...	2¾	2.	2 / 1·55	1

123. The annual rate of increase, estimated by the *Economist* on Mr. Newmarch's method, *viz.*, two millions, agrees with Mr. Newmarch's second estimate; but if Mr. Newmarch was right in his estimate for 1856, then the subsequent increase according to Mr. Jevons, as ascertained by a method of inquiry which the *Economist* mentioned with commendation, had been, up to 1866, at the rate of only one million a year. The *Economist* observed, with respect to the larger estimate of two millions, "there is no means, however, "of testing whether there has been such a melting of sovereigns, except by "an enquiry from time to time, into the actual amount of the circulation, in "the mode which Mr. Jevons adopted in 1868. If such an account of the "circulation could be made up from time to time, it would show what deviation "there is between the actual addition to the coinage, and the addition as "computed in the way we have described. In the meantime, the estimate of "an average annual addition of two millions sterling is probably not far off the "mark." It has been seen above, however, (paragraph 119) that the customs' returns of bullion and coin imported and exported are unreliable, even as to totals; the inaccuracies must be still greater in the details which profess to divide off the totals into the particulars of British and foreign coin respectively, and of bullion;—yet the reasoning of the *Economist* is based entirely on the accuracy of the returns of exports and imports of British gold coin.

124. The period up to 1856, which gave the annual average of two millions sterling of increase since 1844, included eight years of great expansion of trade by the gold discoveries in California, which were followed in 1850 by similar discoveries in Australia. The increase in that period was manifestly exceptional. The period since 1856 embraces a time from 1860, if not earlier, during which there has been a great extension of banks, and of the system of the Clearing House, through both which agencies, and very recently through the expedient of cheque banks, the use of coin has been greatly economised. The expansion of trade since 1861 has also been promoted by an enormous increase of discounts and of bill circulation, the settlements of which are made by cheques at the Clearing House and elsewhere. On all these considerations, and as the *Economist*, while acknowledging the superiority of Mr. Jevons' method of enquiry, overlooked that by that method Mr. Jevons had arrived at a result which gave an increase of only one million sterling a year, up to 1866, over Mr. Newmarch's estimate of 70 millions as the circulation in 1856, the gold coin circulation of the United Kingdom in 1874, may be estimated at Mr. Jevons' figure of 80 millions in 1866, *plus* an addition of 8 millions for the subsequent eight years to the end of 1874; thus giving a total of 88 millions; and even this result may be an overestimate, for Mr. Jevons considered that, owing to the extensive practice of melting down new sovereigns for exportation, his reckoning of 80 millions probably overstated the circulation of the year 1866.

125. In paragraph 76, it has been stated that out of 62·13 millions sterling of gold in the Bank of France eighteen millions may be set free for other countries, on the resumption of specie payments, having regard (paragraph 78) to the large amount of gold hoarded in the country from the circulation previous to the war. The amount of that circulation has been variously stated. On 15th February 1873, the *Economist* remarked that "France in twenty years

"took up about 200 millions sterling of gold;" but from this should be deducted the exports of gold overland. M. Bonnet, writing in August 1874, (paragraph 78) stated that the stock of specie in France, (including that hoarded) amounts to 5,000 or 6,000 millions of francs, of which 1,000 or 1,200 millions consisted of silver (paragraph 86) leaving 4,000 or 4,800 millions of francs, or 160 or 192 millions sterling, as the amount of gold coin in circulation or hoarded. The Paris correspondent of the *Economist*, recounting on 6th March 1873, (paragraph 82), the gross coinage in France, less withdrawals of worn coin, from 1795 to 1871, stated the net amount of gold and silver coins at 12,630·658 millions of francs, but added that the effective amount in circulation "in the country, at present probably does not exceed one-third of that sum," *viz.*, 4,221·219 million francs, or 168·85 millions sterling. Deducting from this M. Magne's estimate of 1,500 millions francs, or 60 millions sterling of silver, as in circulation, the remaining coin in gold becomes 108·85 millions sterling against M. Bonnet's estimate of 160 or 192 millions sterling; or if the silver coin be taken at 1,000 millions francs, the amount of gold coin is 128·85 millions sterling. Taking the mean of the two extreme estimates, the gold coin circulation may be stated at 150 millions sterling.

126. The amount of gold coin that exists, or that is to be completed, in the countries which have a gold currency, or which are altering to a gold standard, or which will resume cash payments in gold, may accordingly be stated as follows:—

Para.		Millions.	Gold required for specie payments or for altering the standard.	Silver to be set free.	
		£	£	£	
57	(in Appendix B.) United States ...	73	25	...	
88 & 91	Austria	73	24	7	
94	Italy (say)	50	24	24	(Specie payments
106 & 108	Germany	64	7	62½	remote.)
113	Scandinavia	3	0	1½	
115	Holland	10	(say) 4	10	
116	Belgium	10	7	10	
	United Kingdom	88	...	...	
76 & 87	France	150	*	40	* Will set free 18 millions sterling.
		521	91	155	
	Deduct Italy	50	24	24	
		471	67	131	
99	Russia will require	Silver.	...	30	
		471	67	101	

It is probable that Italy, when she resumes cash payments, will pay in gold, but the probability of resumption is too remote to enter into the present calculation, and the figures relating to Italy have been deducted at the foot of the table. The very large excess of the gold coinage of France over that of all other gold using countries is suggestive.

127. The amount which will be annually required to replace the wear and tear in the circulation of gold coins amounting to 471 millions sterling may now be considered. Mr. Newmarch in his *History of Prices*, volume 6, pages 361 and 365, states that "as the result of an elaborate inquiry in the twenty-third chapter of his work on the production and consumption of the precious metals, Mr. Jacob arrives at the conclusion that the loss, by wear and abrasion, in *gold* and *silver coin*, during the 110 years, 1700—1809, may be estimated at $\frac{1}{420}$th part annually or say 0·238*l* (say 4*s*. 9*d*.) per cent. per annum. And again, in page 411, he writes;—"adopting, as there appears to be good reason for doing, a rate of one-quarter, or 0·25 per cent. per annum, as representing the loss by abrasion and casualties on the stock of gold and silver, &c." In page 723, Mr. Newmarch does indeed correct this estimate, with regard only to silver, as follows;—"considering the nature of the forms in which silver is principally found in India," (as ornaments, brooches, hairpins, &c.,) "we can scarcely estimate the annual loss by wear and abrasion at less than one per cent., or say 4 millions per annum," but he left his estimate of the annual wear and tear of gold unaltered.

128. Manifestly this was an overestimate; for, by the English Coinage Act, sovereigns which have lost more than ·616 per cent. in weight cease to be legal tender, so that, with a wear and tear of ¼ per cent. a sovereign could not circulate, on an average, for even three years. Mr. Jevons, however, in his paper on the metallic currency of the United Kingdom (paragraph 120) deduced from a return prepared by the Bank of England in March 1868, for the International Coinage Commission, that "it is easily calculated that just about eighteen years' wear or "·043 grains a year will reduce a sovereign below its point of legal currency. "Of course it is not meant that every sovereign will be light after eighteen "years' wear, for some are coined heavier than others, or undergo less wear from "accidental circumstances; but these will be balanced by others coined lighter, "or subject to more severe wear. * * My results are strongly corroborated "by experiments made at the Mint in the year 1833 by weighing parcels "of 300 sovereigns coined in each of the years 1817, 1821, 1825, and 1829. The "annual average wear was ·047 grains per annum" afterwards more exactly stated by Mr. Jevons at ·043 grains out of a sovereign's weight of 123·274 grains. For half sovereigns, which offer more than three quarters of the surface of sovereigns, the average annual wear was ·069 grains, from their being much more actively used in circulation. On his estimate of the 80 millions of sovereigns and half sovereigns in circulation in 1866, Mr. Jevons reckoned the wear and tear at £35,000 a year.

129. In a report on the new German Coinage Bill transmitted from Berlin to the Foreign Office, London, in May 1873, it was stated that "the "Empire is bound to keep up the full weight of the gold in circulation; it undertakes the duty of accepting and coining anew every 20 and 10 mark piece which has left the mint, and has become so worn with use as no longer to pass current. It has been ascertained in France and Switzerland that the annual average loss by use in the 20-franc pieces is $\frac{3}{10,000}$ and in the 10-franc pieces about $\frac{4\cdot3}{10,000}$. If we take the loss of weight by use in the 10-mark currency to be about the same, a 20-mark piece of full weight issued by the mint at the present time will have lost $\frac{5}{1,000}$ in weight in 25 years, and a 10-mark piece will have lost the same in weight in 12 years. So that, in 25 and 12 years respectively, the expenses of coining will have to be paid again, with $\frac{5}{1,000}$ additional cost for loss of weight in the two gold pieces mentioned above." Taking $\frac{5}{1,000}$ of loss in 18 years as a mean rate, the annual wear and tear on 379 millions sterling will be only £190,000. Evidently the demand on the current annual supply of gold, for replacing wear and tear is so trifling, that it may be disregarded.

130. The annual increase of gold coin circulation on account of progress in trade has been ascertained from Mr. Jevons' paper to be one million sterling a year for the United Kingdom. At that rate, the annual requirement of gold, for increase of trade of the countries whose gold circulation is stated in paragraph 126 at 471 millions, would be 4·7 millions sterling; but the trade of some countries, such as France and the United States, has been increasing faster than,—while that of most other countries does not increase with the same rapidity as that of the United Kingdom, and it will perhaps be a large overestimate if the total annual demand for replacing wear and tear of coinage and for an expansion of trade be assumed at 8 millions sterling for both the countries which are about to use gold and for those which now use it: but even say 10 millions sterling including consumption in the arts.

131. The *Economist*, on 15th February 1873, discussing this subject of the ordinary annual supply, observed: "The question of the *current demand* is a "more intricate one. The whole history of the market in past times shows "the powerful influence of extraordinary demands. But for the demand for "India and the demand for France, there would not have been sufficient outlets "for all the new supplies of gold, aggravated, as they were, by the substitution "of paper for gold in the United States. At the present moment, besides, "the course of the market is likely to be governed as much as ever by extra-"ordinary changes in the demand. Germany and Scandinavia are substituting "a gold for a silver coinage on the one side, and on the other France is sub-"stituting paper for gold, though its policy may change at any moment. The "Indian demand, which was formerly so great, has also of late years fallen off,

"though it would be rash to assume that under no circumstances will it again "revive. But omitting the question of these great movements, there appears "to be an ascertainable current demand of no small magnitude:

"(1).—England absorbs on the average about five millions a year, about "two millions for coinage, and the remainder for arts and "other purposes.

"(2).—There is a demand of about one million per annum for South "America. Our exports to Brazil and other South American "States in the ten years ending 1871 were almost exactly ten "millions, and this demand, being for English sovereigns, is "apparently a steady demand.

"(3).—The annual consumption of Spain, Portugal, &c., appears to be "about £800,000.

"(4).—The annual absorption by India, though not so great as it was in "1862-63, appears still to exceed four millions. In the five years "ending 1871 the amount absorbed was £21,458,000, or over "four millions annually,—the extremes of variation being "2,283,000*l.* on the one side, and 5,592,000*l.* on the other. "Even before 1850, it must be remembered, India was an "absorbant of gold to the extent of about a million and a half "annually, and it is not surprising that its growth during the "last 20 years should enable it to increase its demands.

"(5).—There is a steady Australian demand of uncertain amount, "but probably nearly equal to the annual minimum coinage of "the Sydney Mint, or about 1,200,000*l.* a year. All these "demands are comparatively stable, and have practically "existed for ten years without any traceable permanent change "on the level of prices,—no further rise or fall, as we saw, having "occurred since 1862. They sum up as follows:—

		£
"(1)	English consumption...	5,000,000
"(2)	South American „	1,000,000
"(3)	Portugal, Spain, &c. „	800,000
"(4)	Indian „	4,000,000
"(5)	Australian „	1,200,000
	"Total current annual consumption ...	12,000,000

"This figure is, perhaps, not quite complete, as there are no doubt many "other miscellaneous demands not easily traceable; but increase such demands "as we may, the conclusion is plain, that a current *annual demand* of 12 millions "sterling, or thereabouts, will not take up a *production* of 20 millions."

132. The consumption estimated for South America, Portugal, and Spain, *viz.*, £1·8 million, is the average annual net export of gold from the United Kingdom to Brazil and the other two countries; but as those countries must re-export to other parts of the world, it is doubtful, in the absence of their trade returns, whether the bulk of this amount need be regarded as a draft on the annual gold supply. Again, in Australia, where the population is small, and the increase thereof is incommensurate with the growth of trade in mainly one article, *viz.*, wool—the product of sparsely peopled pasture lands—the average annual amount of coinage of the Australian mints, estimated at £1·2 million, cannot represent an annual increase of requirement for home consumption; coined gold, equally with bullion, is exported. On the whole, if these two items of the *Economist*, which make up three millions sterling, be reduced to two millions, there may still be an overestimate.

133. For India, the estimate of 4 millions sterling was justified by the net imports into the country up to 1871-72, or a year preceding the latest returns available to the writer in the *Economist* at the time that he wrote; but the net imports have since fallen off, to an annual average from 1871-72 to 1873-74 of £1·963 million, or of £1·932 million to the end of 1874-75. The estimate may accordingly be reduced by two millions, paying regard to the prospect of still further diminution in the exports of raw cotton.

134. The English consumption is entered at 5 millions a year, *viz.*, "two millions for coinage, and the remainder for arts and other purposes." The two millions for coinage may be cut down to one million, on the results established by the enquiries of Mr. Jevons (paragraphs 122 to 124). The higher sum is a large estimate, and it was forced on the *Economist* by the necessity of accounting for part of 28 millions sterling of gold production in 14 years from 1858 to 1871, which was missing on the assumption of the correctness of the inaccurate customs returns of imports and exports of gold. In the paper in the *Economist* of 31st August 1872 (paragraph 119, section 5) it was observed: "There would still be 28 millions to be accounted for, and "what has become of this sum? The answer, we think, should be that "it has been used up for the purposes of art and manufacture. In other "words, the trade of the United Kingdom has consumed about 2 millions "of gold annually since 1858. The amount appears large, and is all the "more startling, perhaps, when it is remembered that considerable amounts "in sovereigns are believed to be disposed of in the same way; but we "understand that it is the experience of those engaged in the bullion "trade that very large amounts are disposed of in the way described. Bir-"mingham, the potteries, the watch-making trade, jewellers, picture-frame-"makers, dentists, are all large takers of gold for their various purposes. Those "interested will form their own estimate of the likelihood of so large an "amount being used in the arts; but we confess we see no other way of "accounting for the greater part of the large sum which is undoubtedly traced "to the United Kingdom, accumulates there year after year, and does not "go into the coinage." This was slender ground for estimating a consumption of two millions a year in the arts, and for increasing the estimate six months later to 3 millions sterling. It has been shown (paragraph 119, section 5) that the acceptance of the customs returns involves absurd conclusions, and that the consumption of silver in the arts has not been anything like two millions a year, though silver is more largely consumed in this way than gold;—moreover, much of the jewellers' requirement is met by re-manufacture of gold in newer fashions, and Mr. Jevons in his paper of November 1868, already quoted, having remarked that, with an international coinage, gold "and silver "would be almost wholly held in the form of coin," added that "certain small "supplies of bullion would, no doubt, be convenient for gold and silver-smiths, "gilders, and other artisans, who consume the precious metals; but in respect to "its main employment, it would be found almost always advantageous to "convert gold into coin at the first opportunity, as its value is thereby "exactly ascertained, and all future expenses for melting and assay would be "avoided." On the whole, the estimate of 3 millions sterling a year, which was begotten of confidence in customs returns that have been convicted of serious inaccuracies may be put aside, and this, and the estimate for India of 4 millions, making an aggregate of 7 millions sterling, may be cut down to 3 millions a year, striking off 4 millions.

135. Thus from the total of 12 millions of ordinary annual requirements estimated by the *Economist* (paragraph 131) there may be struck off 1 million for South America, Spain, and Portugal, 1 million out of two for increase of coinage in England, and 4 millions overestimated for absorption in India and for consumption in the arts, or in all 6 millions, in and out of the United Kingdom, thus reducing the draft on the annual supply of gold, to 6 millions sterling for these ordinary requirements.

136. The reasonableness of this conclusion can be tested. The total production of gold from 1849 to 1873 has been £593·166 millions (paragraph 45); in addition, Holland and Belgium demonetised gold in 1850, liberating, thereby, about 20 millions sterling of gold, total £613·166 millions, or adding 24 millions for 1874, the total becomes 637·166 millions. The special demands on this supply have been—1*stly*, the amount exported to the East; 2*ndly*, the consumption of California and Australia; 3*rdly*, the absorption of gold in the countries, possessed of a double standard, from which silver was expelled by the rise in its price, *viz.*, the United States and France; 4*thly*, the amounts which have been accumulated by Germany, for the alteration to a gold standard. The accumulation, for the same object, by Holland, Belgium, and Austria, for resuming specie payments in gold, may be thrown out of account by setting it

against the gold exported from the currency of the United States (as distinguished from the gold coin which has been driven into private hoards in the country) since the suspension of specie payments. Deducting the amount of these special demands from the total production of gold, from 1849 to 1874, the remainder, divided by 26 years, will give the average annual consumption of gold since 1849 for ordinary requirements.

137. In the History of Prices, vol. 6, page 157, Mr. Newmarch estimated that of the new supplies of gold from 1848 to 1856, from California and Australia, those two countries absorbed 20 millions, and the United States 50 millions for the expulsion of silver by gold from the coinage of those States. By 1861 the gross amount of gold coinage for the United States had risen to 275 millions of dollars,—(paragraph 12 of Appendix B),—but we may take it, still, at Mr. Newmarch's 50 millions sterling.

138. Starting with a total production of 497 millions of gold from 1849 to 1871, the *Economist* on 3rd August 1872 adopted Mr. Newmarch's estimate of the distribution of 174 millions of the supply up to 1856, from which the statement in the preceding paragraph has been taken. For 1857 the *Economist* observed: "We have not the data afterwards obtainable. The production of "that year (27 millions) was probably disposed of in much the same way as the "supplies of the previous decade;" thus raising the figures in the preceding paragraph to 22 millions for California and Australia, but still retaining 50 millions for the United States.

139. The 174 millions accounted for by Mr. Newmarch, and the 27 millions for 1857, total 201 millions, left 296 millions of production from 1858 to 1871, to be accounted for by the *Economist*;—its distribution was given in the following statement:—

	Exported to England.	Otherwise disposed of.	Total production.
	£ Millions.	£ Millions.	£ Millions.
Australian production	92·050	49·231	167·581
Coinage of Sydney	...	26·300	
America	77·646	...	77·646
Russian production	2·021	44·017	46·041
Miscellaneous, amounting to £26·580 millions, less £8·431 millions included in American production.	18·149	...	18·149
	189·869	119·548	309·417

"This gives an apparently larger total to deal with than what we have "reckoned above, (*viz.*, 296 millions) by about 13 millions; but the difficulty, "as we have explained, arises in the last item. The discrepancy is one not "unlikely to exist in such an account, as it is not unlikely that the exports "from gold-producing countries in a given period of years should be rather in "excess of the actual production of those years."

140. Respecting the £49·231 millions of Australian production disposed of otherwise than by exportation to England, the *Economist* observed: "The "difference between the Australian export and the imports received from "Australia into the United Kingdom is undoubtedly due to the direct or in-"direct export from Australia to India. From the official trade statistics "published by the Indian Government, we find that India has received direct-"ly from Australia, since 1857, about 16 millions sterling, and has received "from China 28 millions, and from the Mauritius, Ceylon, and Straits Settle-"ments 15 millions,—the greater part of these receipts being almost certainly "from Australia. The figures on this point do not quite harmonise, the total "shipments from Europe, coupled with the presumed export from Australia, "directly and indirectly to India, making up a larger total than we find to be "received in India; but it is at any rate certain that a very large part indeed "of the Australian export does find its way to India. The shipments are in "fact made from Australia to Galle, and are then sent on to England, or "diverted from the East, as directed by the London Banks." The 49 millions of exports from Australia, otherwise than to England, to the end of 1871, may be regarded accordingly, as having been consumed in Asia—at the rate of two millions a year. Adding six millions for the three years 1872 to 1874,

the total becomes 55 millions. The exports of gold from Europe to the East, from 1851 to 1874, amounted to 61 millions: adding thereto the 55 millions of Australian gold consumed in Asia in the period from 1858 to 1874, the total becomes 116 millions. There have been exports of gold from the East to Europe in that period, but they are more than set-off by the Australian gold consumed in Asia from 1851 to 1857 which is not included in the present account.

141. The consumption within Australia, for the 14 years from 1858 to 1871, is assumed by the *Economist* at the amount of the coinage in Sydney, *viz.*, 26 millions: adding 6 millions for the years 1872 to 1874, the total becomes 32 millions, but this, increased by one-fourth, or to 40 millions, may be assumed as equal to the amount of consumption in both Australia and California, and increasing this amount by the 22 millions of consumption in those countries from 1849 to 1857 (paragraph 138), a total of 62 millions is obtained.

142. The absorption of gold in France, since 1849, being reckoned at 150 millions (paragraph 125), the special demands on the total production of gold since 1849 have been—

			£	
Para.	137.	United States	50	Millions.
„	140.	Exported to the East and from Australia to Asia ..	116	„
„	141.	Consumed in Australia and California ...	62	„
„	142.	Absorbed in France	150	„
		Accumulated in Germany...	57	„
			435	Millions.
		Total production, and amount of gold liberated from Holland and Belgium in 1850 (paragraph 136) ...	637	„
			202	Millions.

leaving 202 millions for ordinary requirements from 1849 to 1874, or a period of 26 years. This gives an annual average of 7¾ millions a year, for ordinary requirements. But the consumption of California, in the earlier years, has doubtless been under-stated (paragraph 6), and if allowance be made on this account, and for a large increase of bullion in the principal European banks of late years, the annual average would be below 7 millions, against an estimate of 6 millions in paragraph 134. The final estimate may, however, be fixed at 7 millions, for ordinary requirements of the countries which have not yet altered to a gold standard, against 12 millions sterling estimated by the *Economist*.

143. This calculation confirms the proofs offered in the early part of this paper (paragraph 44), that the *Economist* has underestimated the production of gold. According to its estimate (paragraph 5), the production from 1849 to 1874 amounted to 529·6 millions; adding thereto 20 millions set free when Holland and Belgium demonetised gold in 1850, the total becomes 549 6 millions, from which 435 millions of special demands being deducted, there remain 115 millions for the ordinary requirements of 26 years, or an average of only 4·4 millions a year.

144. The great disproportion between the gold circulation of 150 millions, entered for France in paragraph 126, against 88 millions for the United Kingdom, and 64 millions for Germany, total 152 millions, will have excited attention. "In twenty years France has absorbed 200 millions of gold at an annual aver-"age rate of 20 millions a year." This, of course, was for replacing nearly the whole of the silver currency of legal tender, and accordingly it was no measure of the future annual demand; yet the *Economist* on 16th January 1875, in estimating future ordinary requirements, remarked, in reference to France, that "for France on a specie basis, to which it is now returning, it (the "annual absorption) was always more than that (5 millions) or, say, 8 "millions;"—so that the *Economist* apparently considers that France should continue to draw upon the future annual supply of gold at rather more than the rate at which she accumulated 150 millions sterling, net, in twenty years. But, perhaps, this is an error; the future requirement of France will be limited to the small percentage (paragraph 129), for replacing wear and tear; and a closer examination of facts may show that the existing stock of at least 150 millions sterling of gold coin, instead of being increased, can be very largely diminished.

145. The monetary unit in France is the silver franc. The gold coinage, all of which is legal tender, consists of 5, 10, 20, 50 and 100 francs pieces; the silver coin consists of $\frac{1}{5}$, $\frac{1}{4}$, $\frac{1}{2}$ franc, 1, 2 and 5 francs pieces. Until 1867, all the silver coins were legal tender for any amount; but since 1867 the coins of smaller value than 5 francs have been legal tender to the amount of only 50 francs. The bulk of the 150 millions of gold was absorbed, however, in the French currency before 1867, in exchange for silver coins of all denominations. At first, the larger coins were sought; but when the great demand for silver for the East continued, the small coins were bought up as well as the larger, and in this manner gold replaced silver in a large mass of retail transactions for which silver, as a subsidiary currency, is employed in other countries. Mr. Newmarch (Vol. 6, page 55 of the *History of Prices*) drew attention to the magnitude of retail transactions in France. He observed: "It was very "much the habit in this country, prior to 1848, to contrast the equable and "uniform course of the Bank of France, and of the money market, generally, "in France, with the fluctuations which so constantly occurred in the con- "dition of the Bank of England, and the state of confidence and credit in "Lombard Street. But the truth really is that the two cases presented "scarcely any analogy.

"In France, the dealings were essentially of a retail character, and but a "very small part of them called into existence any form of transferable credit. "The purchases and sales were effected by the employment of an enormous "mass of metallic money, and the great central banking institution of the "country, at Paris, was enabled to maintain a uniform course, and practically a "uniform rate of discount of 4 per cent. for the four sufficient reasons—(1) "of the comparatively limited external trade of France; (2) of the slow "and retail nature of the mercantile transactions of France; (3) of the "very small extent to which those transactions were carried on by means of "any form of transferable credit; and (4) lastly, of the employment, upon the "largest scale, of masses of metallic money for all purposes of sale and "purchase."

146. The principal coins in the existing currencies of England, France, and Germany are—

ENGLAND.		GERMANY.		FRANCE. At the rating of Francs 25-57-2 cents. Per £.	
Gold.	*Shillings.*	*Gold.*	£ s. d.	*Gold.*	£ s. d.
Sovereign = ...	20	20 Mark piece ...	0 19 7	100 Francs pieces	3 2 5·28
½ Sovereign = ...	10	10 „ „ ...	0 9 9½	50 „ ...	1 11 8·64
		5 0 0 ...	0 4 11	20 „ ...	0 15 10·22
				10 „ ...	0 7 11·16
				5 „ ...	0 3 11·58
		Silver.		*Silver.*	
		5 Mark piece ...			
		3 Mark piece ...		5 Francs ...	0 3 11·58
Shilling = ...	1	Reichs-mark ...	0 1 0	2 „ ... *	0 1 7·66
				1 „ ... *	0 0 9·38

* Tokens

In England the smallest gold coin is 10 times, and the largest is only 20 times, the nominal value of the unit in the subsidiary silver currency; the same proportion was arranged by Germany in the original Coinage Act of 1871; the 5-mark piece was an after-thought to meet a temporary purpose; as a permanent coin, it seems superfluous, and, doubtless, it will be withdrawn on the introduction of the silver 5-mark piece; for, at present, the old silver coins, of nearly 5-marks and other values, are circulating as legal tender at a fixed relative value to gold;—and were the new silver 5-mark piece to be introduced before withdrawal of the old silver coins, the bullion merchants would work the exchange between the two to the disturbance of the currency: during this temporary inability to introduce the new silver 5-mark piece, the gold 5-mark piece appears to be employed as a substitute.

147. In France the smallest gold coin is only 5 times, and the largest is 100 times, the nominal value of the silver unit. Through the smallness of her unit of gold coin, France foregoes on her silver currency a large profit which should be proportionally much greater than that in England, the immense amount of retail transactions in France being considered. On the other hand, the exceeding largeness of the gold coin of the higher denominations evidences the little use which is made of cheques, notes, &c., in economising the gold currency; and the means of thus economising it have been greatly multiplied by recently carrying out the law of 1857, in forming a branch of the Bank of France in each of the 89 departments of France. The 150 millions of gold which France has absorbed were forced on her chiefly by bullion operations, and did not accrue solely or principally from other countries settling the balance due on trade in merchandise. The proportions of gold and silver in the French currency have not therefore adjusted themselves to the respective needs for large and small transactions of buying and selling goods. Moreover, France has not the means any longer of paying 8 millions of silver yearly for 8 millions of gold; while, if she can provide 8 millions of additional exports to buy the gold, she would prefer to receive imports of merchandise instead; and taking a lesson in currency reform, as in military re-organisation, from her late enemy, she may recast her currency after the example of Germany, and so reduce the amount of her gold coinage, and with it the annual demand for gold, by more than one-half. Such a reform might set free about 70 millions of gold, including the 18 millions reckoned in paragraph 76. The remaining 52 millions would be replaced by a silver token coinage containing pure silver of say ten per cent. less value, or about 47 millions sterling.

148. In like manner the United States can economise their gold currency. The silver dollar has been lately demonetised, and a gold dollar, or one-tenth eagle, as legal tender for any amount, fulfils the function of the half sovereign in England. Apparently, the gold dollar has been retained because the dollar is the unit of account, and the silver dollar has been demonetised. But it is not necessary that the smallest coin of legal tender up to any amount should correspond with the unit of account. It is not so in England, nor is it so in Germany, where the mark (value one shilling) is the unit of account, while the crown piece (corresponding to the half sovereign) is the smallest permanent gold coin. In like manner, the United States will, no doubt, revive the silver dollar in the form of a debased or subsidiary coin, as legal tender up to 10 dollars, and withdraw the gold dollar. Thereby, a profit on the silver coinage, and a saving of gold for the currency would be secured. In that case, the gold coin circulation of the United States might be estimated at even less than 60 millions sterling, instead of the 73 millions entered in paragraph 126. Thus at least 13 millions of gold might be struck out from the American requirement.

149. The estimate of 73 millions of gold circulation for Austria, against 64 millions for Germany, will also admit of reduction by perhaps 13 millions, on the supposition that the same judicious use, as in Germany, will be made of silver as a subsidiary currency.

150. In the United Kingdom there is, perhaps, little prospect of economising the use of gold. The facts are as follows:—

	1844.	1856.	1864.	1866.	1870.	1873.	1875.
	£ Millions	£ Millions	£ Millions	£ Millions	£ Millions	£ Millions	£ Millions
1. Gold coin in circulation ...	46	70	78	80	84	87	88
BANK OF ENGLAND.							
Annual average of—							
2. Notes in hands of the public	20·200	19·800	20·500	23·100	23·300	25·600	28·253
3. Bullion and specie in Issue Department	13·500	14·200	13·500	14·900	20·400	22·600	27·439
4. Balance, or notes not covered by bullion	6·700	5·600 (1854)	7·000	8·200	2·900	3·000	·814
5. Banking reserve (notes) ...	8·500	7·200	7·500	...	...	11·220	14·187
6. Bankers' balances at Bank...	·900	2·600	4·900	...	...	8·500	...
7. Average rate of discount ...	2½	5½	7½	7	3½	4½	...
CLEARING HOUSE.	...	(1868)	(1869)	(1870)	(1871)	...	...
8. Total amount cleared ...	...	3425·1	3626·3	3914·2	4826·2	...	...

The notes not covered by bullion had decreased in 1873, since the Bank Act of 1844, by £ 3·7 millions, and in July 1875 by nearly 6 millions: in other words, on the date last-mentioned almost the whole amount of notes with the public was covered by bullion; and as the notes in circulation, outside the Bank, had increased in 1875 by only 8 millions, while the bullion had increased by 14 millions over the corresponding amounts in 1844, it would seem that a larger amount of bullion is now locked up than in 1844. Since that year, however, bankers' balances in the Bank of England have increased by 7 millions. The circulation of notes materially increased after the panic of 1866. Ordinarily, the instrumentality of the clearing house, the working of which rests entirely on mercantile credit, is employed for the settlement of transactions amounting to some thousand millions sterling per annum without the help of any coin or notes; but in a panic, when credit is damaged, the agency of the clearing house becomes ineffective, and there is a greater pressure upon the banking reserve of notes and on the bullion in the Issue Department. On this account, and from the balances of the London banks having of late years been concentrated in the Bank of England, a feeling has strengthened that the Bank should have a larger bullion balance than formerly. On the other hand, the amounts of the autumn drain of bullion from London to the country and of the further periodical drain in May and November of gold for the Scotch and Irish banks have been ascertained with precision, insomuch that the periods of flow and ebb are reckoned with sufficient accuracy for all practical purposes. The periods and amount of the ordinary recurring foreign drain of gold for payments for corn and cotton are also calculated with approximate accuracy. On these considerations the expediency of guardedly relaxing the Bank Act of 1844 under certain conditions, by allowing the temporary issue of notes uncovered by bullion for these extra drains, has been discussed of late years, and was recently under consideration by a Committee of the House of Commons. Eventually, a temporary excess issue may be allowed on the deposit of consols with the Treasury, and at a charge to the Bank of a rate of interest increasing with the amounts of excess issue, and pitched not too high for the object of affording relief to the market, but yet sufficiently high to make it the Bank's interest to withdraw the extra issue as soon as possible. This would check the ebb and flow of some millions sterling of gold which are now afloat to and from the Continent, or to and from the country; and to that extent the use of gold would be economised; but, on the other hand, as above stated,

there is a tendency to accumulate a larger amount of gold as an ordinary reserve against occasional panics; and there is the fact that in July 1875 hardly any notes were in circulation, outside the Bank of England, which were not covered by gold. On the whole, then, there is little prospect of economising the use of gold in England.

151. To sum up the immediately preceding paragraphs. There is a contingency, amounting to a reasonable probability, of certain countries, with a single gold standard, extending the range of legal tender of the silver token coinage, so as to dispense with some of the smaller gold coins. The contingent or probable saving of gold from this cause may be 52 millions sterling in France, and 13 millions each in the United States and in Austria, total 78 millions of gold, which would be replaced by a silver token coinage of about 10 per cent. less value, that is, by about 70 millions worth of silver.

152. In the same way as the disposal of the annual production of gold since 1849 has been considered, that of the silver produced from 1851 to 1874 may be set forth as follows:—

	SILVER.							GOLD.		SILVER
	Annual production.	Imported into United Kingdom from producing countries.				Exported to the East.	Price per ounce of standard silver in London.	Annual production.	Year.	British India.
		Mexico, South America, &c.	United States.	Others.	Total.					Net imports into.
	£	£	£	£	£	£	Pence.	£		£
	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.		Millions.		Millions.
1851 ..	9·	..	..	..	..	1·7	61	15·45	1851-2	2·9
1852 ..	8·8	..	..	..	..	2·6	60⅜	26·16	1852-3	4·6
1853 ..	8·4	..	..	..	..	5·6	61½	27·32	1853-4	2·3
1854 ..	8·5	..	..	..	..	4·6	,,	24·77	1854-5	0·03
1855 ..	9.	..	..	..	..	7·9	61 5/8	26·50	1855-6	8·2
1856 ..	9·1	..	..	..	..	14·1	,,	27·85	1856-7	11·1
	35·0	..	..	..	..	32·2	...	106·44		21·6
1857 ..	9·6	..	..	..	..	20·1	61	26·64	1857-8	12·2
1858 ..	10·2	2 99	·31	..	3·30	5 7	61 1/16	26 22	1858-9	7·7
1859 ..	10 2	3·40	1·76	...	5·16	16·4	62 1/16	26·02	1859-60	11·1
1860 ..	10·6	4 53	·88	..	5·41	10·8	61 11/16	24·09	1860-1	5·3
1861 ..	11·2	5·12	·03	..	5·15	8·9	60 13/16	24·21	1861-2	9·1
	51·8	16 04	2·98	..	19·02	61·9	,,	127·18		45·4
1862 ..	12·	6·35	·34	..	6·69	14·6	61 3/16	23·76	1862-3	12·6
1863 ..	13·	6.81	·63	...	7·44	15·1	61 5/8	23·99	1863-4	12·8
1864 ..	13·2	7·08	·16	..	7·24	16·9	,,	23·81	1864-5	10·1
1865 ..	14·7	5·02	·23	..	5·25	9·7	61 1/16	25·68	1865-6	18·7
1866 ..	14·4	4·48	1·84	·02	6·34	7·1	61⅛	26·62	1866-7	1·0
	67·3	29·74	3·20	·02	32·96	63·4	..	123·86		55·2
Total 1853 to 66	154·1	..	..	..	..	157·5	..	357·48	1853-4 to 1866-7	122·2
1867 ..	14·7	5·12	1·47	..	6·59	2·1	60 9/16	24·91	1867-8	5·6
1868 ..	14·	3·44	1·92	..	5·36	3·6	60½	24·77	1868-9	8·6
1869 ..	13·5	2·67	1·11	·01	3·79	6·6	60 7/16	25·18	1869-70	7·3
1870 ..	14·8	4·26	3·39	..	7·65	2·2	60 9/16	24·06	1870-1	·9
1871 ...	15·6	3·46	5·69	·02	9·17	3·9	60½	23·82	1871-2	6·5
	72·6	18·95	13·58	·03	32·56	18·4	..	122·74		31·9
1872 ..	16·1	2·85	4·58	·03	7·46	6·5	60 5/16	24·	1872-3	·7
1873 ..	17·4	3·08	5·99	·03	9·10	3·5	59¼	24·	1873-4	2·5
1874 ..	17·4	4 01	3·48	·02	7·51	7·8	59 5/16	estimated 24·	1874-5	4·3
	50·9	9·94	14 05	.08	24·07	17·8	...	72·		7·5
Grand Total	295·4	..	..	..	..	198·	..	593 83		169·1
					Annual average.					
1853-56 ..	8·75	..	..	..	..	8·05	..	26·61	..	5·4
1857-61 ..	10·36	..	..	(58 to 61)	4·75	12·38	..	25·44	..	9·3
1862-66 ..	13·46	..	..	..	6·59	12·68	..	24·77	..	11·
1853-66 ..	11·	..	..	..	..	11·25	..	25·50	..	8·
1867-71 ..	14·5	..	..	..	6·51	3·68	..	24·55	..	6·4
1872-74 ..	16·9	...	..	..	8·02	5·93	..	24·	..	2·5
Total ..	12·3	...	..	..	..	8·33	..	24·74		

153. The exports to the East were to India and China, while the imports into British India were not from the West exclusively, but also, to a great extent, from China. Disregarding, however, the transfers of silver between India and countries in Asia, it may be held that of the total exports of silver to the East, an amount equal to the net imports of silver into British India has been absorbed in this country, either directly from the West, or by transfer from other countries in Asia which received it, in the first instance, from the West. Summarising the results relating to silver, we have—

	Years.	Amount of production. £ Millions.	Exported to the East. £ Millions.	Imported into India. £ Millions.	Gold production. Millions.
1851	1	9·	1·7	2·9	15·5
1852	1	8·8	2·6	4·6	26·16
1853 to 1866	14	154·1	157·5	122·2	357·5
1867 to 1871	5	72·6	18·4	31·9	122·7
1872 to 1874	3	50·9	17·8	7·5	72·
	24	295·4	198·0	169·1	593·8

In 1848, before the discovery of gold in California, the annual production of gold amounted to 10 millions, and of silver to 8·72, or, say, 9 millions sterling.

In 1851 and 1852 the silver exported to the East was a little above two millions a year, or somewhat less than one-fourth the annual production of silver. The remainder was consumed in the West. But from 1853 to 1866 an amount equal to the whole annual production of that period (154 millions), with three millions more, of silver, was exported to the East, where four-fifths of the amount, or 122 millions, were absorbed in India. The gold produced from 1853 to 1866 amounted to 357 millions, of which about 33 millions were consumed in California and Australia. The distribution of the gold and silver produced in this period was as follows :—

1853 to 1866—	Production. Amount equal to old rate of production. £ Millions.	Production. Increase of production. £ Millions.	Total £ Millions.	Distribution. Exported to East, and Australian gold retained in Asia. £ Millions.	Distribution. Retained in Australia and California. £ Millions.	Distribution. Remainder in West, excluding California £ Millions.	Total. £ Millions.
Gold ...	140	216	356	48*	33	275	356
Silver ...	126	28	154	158	...	—4	154
Total ...	266	244	510	206	33	271	510

* Includes export to East for full period, but Australian gold retained in Asia from 1858 to 1866.

154. In a paper read before the Statistical Society in May 1865, by Mr. Jevons, Professor of Political Economy in Queen's College, Liverpool, he observed in respect of the drain of silver to the East in the earlier period from 1853: "European markets, where expedients for economising "currency are in common and growing use, could not possibly absorb the "continuous supplies from the diggings without a complete revolution "in prices. But no sooner had a certain moderate rise occurred than "the surplus of the precious metals flowed off to the East, where an "immense metallic currency, an absence of any modes of economising it, and "a general taste for the luxurious use of the precious metals opens a great "sphere for their absorption and consumption. That this current was produced "by a redundancy of gold is proved, as Professor Cairnes anticipated, by a low "price of oriental produce. Had it been occasioned by an immense demand "here (England) for oriental produce, and a consequent balance of trade "outwards, oriental produce would have been comparatively high, not low in "price." This correctly shows how the export of the precious metals to the East saved Europe from the revolution in prices which had been dreaded by

M. Chevalier; but it does not bring out the fact that the West did absorb "the "continuous supplies from the diggings," *viz.*, 216 millions, less 33 retained in California and Australia, or 183 millions net, but only by exporting 158 millions of silver instead to the East. A further discussion of the figures in the above table will be reserved for the sequel.

155. Gathering up the results of some previous paragraphs, we have—

1*st.*—A total yearly gold production of 24 millions sterling (paragraph 44), and a silver production of 18 millions (paragraph 56).

2*nd.*—An annual (outside) demand of 10 millions sterling of gold, after the countries which are about to resume specie payments, or are altering their standard, shall have completed their gold coinage (paragraph 130), but, meanwhile, an annual demand of 7 millions sterling (paragraph 143), or even, say, 8 millions.

3*rd.*—A special demand for gold, on meeting which silver will be set free, as follows, by the countries mentioned in 2:—

	Probable period for completing the demand.	Gold required.	Silver to be set free.	
	£ Millions.	£ Millions.	£ Millions.	
Germany	1875	7	59½	
Scandinavia, Holland, and Belgium.	1877	11	21½	
Austria	1878 (possibly)	24	7	
France	1878	...	40	
United States	1879	25	...	
		67	128	
Italy	Remote	24	+24	
Russia	(Uncertain) will require ...	...	—30	=122
			—6	

156. The annual demand for ordinary requirements being 8 millions, and the annual supply being 24 millions, giving a surplus of 16 millions, four years (including 1875) would suffice for meeting the requirement of 67 millions. Even if 22 millions which has been assumed by one writer be adopted as the total annual production, the net surplus of 14 millions from 1875 to 1879 would cover the total special demand of 67 millions. In neither case would it be necessary to trench on the 18 millions sterling of gold which eventually will be set free by the resumption of specie payments in France. The yearly surplus, moreover, would always be in advance of the amount, and of the date, of new demand from each country.

157. Or, if it be the case that the 57·221 millions sterling of gold "ready coined up to 5th June 1875" was the gross amount of new coinage out of which 15 to 20 millions sterling of gold was exported from Germany in 1873 and 1874 (paragraph 108), the total special demand for gold in the three years up to 1877 might be 36 millions, or still within the surplus over ordinary requirements of 16 millions a year. Furthermore, the 18 millions of gold to be liberated by France would replace the gold which Germany might draw from Europe.

158. There is also the contingency (paragraph 151) that 78 millions sterling of gold may be set free, by the absorption of 70 millions of silver, by countries with a single gold standard, which can economise gold, and at the same time secure a profit on the silver coinage.

159. But while the gold specially required by Germany, Holland, &c., is forthcoming, the disposal of the silver which those countries will set free is matter of grave concern, especially for India. In paragraph 155 the amount of that silver is stated at 128 millions sterling; but to this sum must be added the 15 to 20 (say 17) millions of silver which was imported into Germany for the exportation of a corresponding amount of gold coin (paragraph 108), thus making an aggregate surplus store of 145 millions sterling, equal to eight years' annual production of silver. As has been seen, silver is practically demonetised in Europe; the countries with an inconvertible paper currency do not want any new supply of it as currency, and such of them as may shortly resume

specie payments will do so in gold. Other countries again,—*viz.*, Germany, Holland, Belgium, Scandinavia,—have demonetised silver, or have stopped any further coinage of it, except as tokens or a subsidiary currency. With this total cessation of European demand for silver, how and where are the 18 millions a year of fresh production, and the 145 millions of surplus store which has accumulated in Europe to be absorbed?

160. A similar question arises respecting the annual production of gold. By 1879 all the special demands for gold, by the countries which are altering their standard to gold, or are about to resume specie payments, will have been met. Thereafter, with an annual production of 24 millions sterling, and with an annual demand which is overestimated at 10 millions, there will be a surplus of 14 millions. What is to be done with it?

161. A similar difficulty occurred on the discovery of gold in California and Australia. As observed by Mr. Jevons (paragraph 154), Europe could not have absorbed the continuous supplies from the diggings in the ordinary course of commerce without a complete (and disastrous) revolution in prices. The difficulty was met, then (through the happy accident of a double standard in the United States and France), by those countries changing in effect to a single gold standard; and, later, by Germany, Scandinavia, Holland, and Belgium doing the same. The difficulty in the present day (paragraph 160) is precisely the same, but, unfortunately, the remedy which succeeded in 1853 to 1874 cannot be repeated,—silver being already demonetised in Europe (paragraph 159). And even if silver were not thus demonetised, its excessive depreciation would, now, cause it to expel gold from any European country which might be rash enough to retain a double gold standard, in the face of that depreciation.

162. Asia, remarked Mr. Jevons in 1865, "is the great reservoir and sink "of the precious metals. It has saved us from a commercial revolution, and "taken off our hands many millions of bullion which would be worse than "useless. And from the earliest historical ages it has stood in a similar "relation to Europe." Doubtless, Asia should continue in this relation, for the prosperity of Europe is the well-being of the world. Moreover, in helping to absorb the surplus of the future annual supply of gold, Asia would benefit, if only the enormous annual surplus of silver be not also thrown into this sink and reservoir of the precious metals. The two surpluses of 15 millions of gold, and, say, 15 millions of silver per annum could not be poured into Asia without causing an embarrassment of riches which, in the words of Mr. Jevons, just quoted, would be "worse than useless"—even disastrous.

163. No doubt the annual flow into Asia of 30 millions sterling of the precious metals is impossible, in settlement of a balance of trade, there not being, and there never having been, that amount of balance of trade in favor of Asia. But this only brings out clearly the issue, that if silver be demonetised in Asia, the greater part of the 15 millions of future annual surplus of gold can be absorbed in this Continent, whereas if it be not demonetised, the whole of the annual surplus of silver will flow into Asia, not in settlement of a balance of trade, but as merchandise, causing, by its volume as such, a complete revolution in prices.

164. In this question, Africa is of little account; and, moreover, the gold discoveries in various parts of Africa, which have been reported, must demonetise silver on that Continent. In America, as in Europe, silver is now practically demonetised, either by the use of an inconvertible paper currency, or of gold in countries which continue specie payments. Australasia has a single gold standard; so that, outside Asia, silver is mere merchandise.

165. Professor Cairnes in a passage quoted by Professor Jevons wrote: "I had also said" ("Serious Fall," &c., page 37), having shown upon a wide basis "of facts that both gold and silver are depreciated here, I am much more "inclined to regard this depreciation as the cause of the Eastern drain. The "fall in the value of silver, compared with most other goods, makes it more "profitable to pay for Eastern produce with silver bullion than with our "manufactures, silver being always acceptable among Asiatic nations."

166. The price per ounce of standard silver in London was as follows from 1833 to 1850 :—

	Pence.		Pence.		Pence.
1833	... $59\frac{3}{16}$	1839	... $60\frac{3}{8}$	1845	... $59\frac{1}{4}$
1834	... $59\frac{5}{16}$	1840	... ,,	1846	... $59\frac{5}{16}$
1835	... $59\frac{1}{8}$	1841	... $60\frac{1}{16}$	1847	... $59\frac{1}{8}$
1836	... 60	1842	... $59\frac{7}{16}$	1848	... $59\frac{1}{2}$
1837	... $59\frac{9}{16}$	1843	... $59\frac{3}{16}$	1849	... $59\frac{3}{4}$
1838	.... $59\frac{1}{2}$	1844	... $59\frac{1}{2}$	1850	... $60\frac{1}{16}$

The prices from 1851 to 1874 are given in paragraph 152. Generally it may be said that the price of silver has ranged as follows, *viz.*:—

I.—From 1833 to 1850 at $59\frac{1}{2}$ to 60 pence, but nearer to $59\frac{1}{2}$ pence since 1842.

II.—From 1851 to 1866 at and above 61 pence, with a fall only twice in that period, *viz.*, in 1852 and 1861 to $60\frac{15}{16}$ or $60\frac{13}{16}$ pence.

III.—From 1867 to 1872 at and about $60\frac{1}{2}$ pence, until the price receded in 1872 to $60\frac{5}{16}$ pence.

IV.—In 1873 and 1874 at and about $59\frac{1}{4}$ pence, but with a fall in 1875 to 56 pence and even $55\frac{1}{8}$ pence.

In the first period the price rose in 1850 above 60 pence from a large exportation of silver to France, and from the demonetisation of gold in Holland and Belgium. In the second period it ranged at the highest it has ever attained, *viz.*, during the drain of silver to the East, from 1853 to 1866; in the third and fourth periods it receded, and at length fell 7 per cent. below the lowest price in any year since 1833. In the first two periods the price rose from an increase of special demand, *viz.*, for Holland and Belgium, and afterwards for the East; in the third and fourth periods it fell from a considerable abatement, amounting, at times, almost to a cessation of demand for silver in the London market, and from an increased supply of silver.

167. The special demand of Belgium and Holland was casual, of brief duration, and of a kind which will not recur in Europe. The ordinary demand for silver in London is for that part of the remittances to the East which cannot be effected by purchasing the Secretary of State's bills on India; hence a cessation of his drawings during the mutiny, and during the subsequent disorganization of the finances from 1857 to 1861, increased the demand for silver; and though the drafts on India were resumed in 1862, yet the same effect on the market continued from 1862 to 1867,—1*st*, on account of the enormous expansion of the exports from India during the cotton famine, and 2*ndly*, because the Secretary of State's drawings were still restricted to very much less than his total disbursements, owing to the large payments of Guaranteed Railway capital into the Home Treasury. The first of these causes was special, and is not likely to recur. The net exports, from India, of merchandise for settlement, through the United Kingdom, amounted to 32 millions a year from 1863-64 to 1865-66; and though in 1872-73-74 the annual average was 21·7 millions, and in 1874-75, 20·4 millions against 21·4 millions in 1862-63, yet these three nearly equal amounts represent for 1872 to 1874 a smaller actual indebtedness to India than the same amount in 1862-63, owing to the fall of more than 8 per cent. in the price of silver since that year. The percentage has to be taken off the total exports, which, excluding China and the Eastern Settlements, amounted to 42 millions in 1873-74. And while the amount of net export from India is really less than in 1862-63, the bills drawn by the Secretary of State amounted to 13 millions in 1873-74, and will reach $14\frac{1}{8}$ millions in 1875-76 against $6\frac{3}{8}$ millions in 1862-63. In other words, while the apparent balance of trade in 1872 to 1874 has been somewhat less than in 1862-63 and 11 millions less than in 1863 to 1865, the demand for silver has been abated (apart from this decrease of England's indebtedness to India) to the extent of some 8 millions a year. And as the amount of English capital invested in India has increased since 1862-63, the remittance to England of the returns on that capital is a further abatement of the demand in London for silver.

168. The preceding remarks relate to England's indebtedness on the balance of the Indian trade; there was a similar increase of indebtedness on

the principal remainder of the Eastern trade, *viz.*, with China (including Hong-Kong), Japan and the Philippine Islands, during the early years of the cotton famine, and a great decrease of that indebtedness (in other words a greatly diminished demand for silver in London) in the subsequent period; thus—

	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
Imports into United Kingdom ...	7·82	9·87	10·10	10·46	13·44	16·86	17·95	13·32	12·60
Exports from United Kingdom ...	3·52	5·28	6·13	5·78	3·71	4·80	6·45	7·91	10·25
Net ...	4·30	4·59	3·97	4·68	9·73	12·06	11·50	5·41	2·35

	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.
Imports	10·60	13·61	11·67	11·20	13·80	15·96	15·28	13·93
Exports	10·45	10·94	11·70	12·50	11·99	12·52	14·85	10·60
	·15	2·67	—·03	—1·30	1·81	3·44	·43	3·33

169. The indebtedness of the United States to China used to be settled partly by direct exportation of silver from California to China, and the remainder through the United Kingdom. M. Seyd wrote in 1868:—"The rich silver mines, opened in 1860 in California, furnish many millions of silver per annum; and as the Port of San Francisco, on the opposite side of the Pacific Ocean, is within 50 to 70 days' sail by clipper ship, or 30 to 50 days by steamer, to Hong-Kong, California is now a convenient market for the supply of silver to China for European account. Shippers in San Francisco are accordingly furnished with credits from Anglo-Indian Banks, to draw 60 days' sight or short bills on London, and invest the proceeds in the purchase of silver for China. * * The silver arrives in Hong-Kong say in 60 days, whilst the drafts on London, taking 30 days' transit, and due in 60 days, mature one month later. If the shipment had been made from London, it would have taken say three months to arrive at Hong-Kong: so the London firm saves in all four months' interest at 5 per cent. per annum, equivalent to $\frac{3}{8}$ pence, making the exchange 50 $\frac{5}{8}$ pence per dollar. The same shipment made from England would give an exchange of about 54 pence. The shipment from California is therefore cheaper than that from England. * * * California will in future supply the greater portion of silver required for China." As, however, it appears from the table in paragraph 152 that, notwithstanding the direct shipments of silver from California to China, the exports of silver from the United States to England have risen from one-fifth million sterling in 1865 to an annual average of nearly 4 millions from 1870 to 1874, the conclusion is that the indebtedness of the States to China is stationary or on the decline, and that the increased exports to England are of silver for which no outlet can be found in London for the settlement of the American debt to China.

170. It further appears from the table in paragraph 152 that the annual average production of silver in 1853 to 1856 was one-third, and from 1857 to 1866 was rather less than half, while in 1872 to 1874 it was more than three-fifths the annual average production of gold, also that in the period from 1853 to 1866 an outlet in Asia was found for the whole of the annual production of silver, whereas in the three years 1872 to 1874, when the silver production exceeded three-fifths of the gold production, the East absorbed only one-third of the former, exclusive of the direct shipments to China from California and Mexico. This increase of supply in London, with a diminished outlet for the silver, has necessarily depressed its market price in London. The annual average of the total imports of silver into England from the silver-producing countries was 6½ millions sterling from 1862 to 1871, and 8 millions from 1872 to 1874.

171. Thus it appears—

1*st*.—That from 1833 to 1850 the price of standard silver fluctuated at about 59½ to 60 pence an ounce, but nearer to 59½ pence after 1842 (paragraph 166).

2*nd*.—That the price rose above 60 pence and 61 pence, even nearly reaching 62 pence in one year (1860), from temporary causes, which operated, one of them until 1861, and the other until 1866, whereby the price remained above 61 pence until 1866 (paragraph 167).

3*rd*.—That the operation of these temporary causes having ceased, the price gradually receded by 1874 to the rate, below 60 pence, which had obtained before those causes began to operate (paragraph 152).

4*th*.—That, while the demand for silver has fallen off in London (paragraphs 167 and 168), the supply there has increased (paragraphs 169 and 170), and that this depressing effect on the market has caused the price of silver to fall in 1875 to 56 pence an ounce and even less.

172. When to the last-mentioned cause is added the cessation of demand from the numerous States in Europe which have practically demonetised silver, it is not surprising that the price should have fallen in 1875 about 7 per cent. below the lowest price that had ever obtained since 1833.

173. In this exposition of the causes of the diminished price of silver, no account has been taken of the store of silver obtained by Germany in part payment of the French indemnity, of the further store involuntarily acquired by the exportation of about 17 millions sterling of the new German gold coinage, and of the silver constituting the old currency of Germany which is to be withdrawn, but, as yet, has been but partially withdrawn from circulation. It has been shown in paragraph 62 that whatever fear may, at one time, have been entertained that Germany would suddenly throw its immense hoard of silver on the European market, all apprehension on this score must have ceased in March 1874, when it was announced that the German Government would not sell the silver, except at a reasonable price. Only 1½ million sterling of that silver has as yet been thrown on the European market; but (*Economist*, 17th July 1875) "it is said "that the new gold standard is to be adopted by the whole Empire on "the 1st January 1876, the requisite three months' notice being given on "the 1st October next. At present this standard is only in force in Prussia, "and in some other States, and its adoption by the whole Empire will, "therefore, be a considerable change, and a considerable issue of gold coins "will be necessary to render it possible." After extending the new gold coinage throughout the Empire, the German Government cannot be expected to wait an indefinite number of years for the disposal of the enormous mass of silver on which there must be a heavy loss of interest meanwhile.

174. But if, without the pressure on the market of those immense hoards, the price of silver has fallen to 56 pence an ounce, or even less at times, the further depreciation from the sale of the 145 millions sterling of silver mentioned in paragraph 159 in European markets, where demonetised silver will, henceforth, be but merchandise, cannot be regarded without dismay by all who are concerned in the finances of India, if silver is to be retained as the standard in this country.

175. It is curious to note the various estimates of the annual production of gold. In March 1869 the *Economist* estimated it at 30 millions: in 1870 at 15 millions from the new sources of California and Australasia: in 1873 at 20 millions from old and new sources. In this paper it has been assumed (paragraph 44) at 23½ or 24 millions, *viz*., for Russia at the *Economist's* figure of 4·2 millions, for Australia at 10½ millions, and for the United States at 8·9 millions. The last mentioned sum is much below the amounts returned by

the Commissioner of Mining Statistics (paragraph 12), *viz.*:—

	1869.	1870.	1871.	1872.
	$ Millions.	$ Millions.	$ Millions.	$ Millions.
Gold exclusive of Nevada	47·	49·475	43·913	36·688
One-third of Nevada production	4·66	5·333	7·500	8·516
	51·66	54·808	51·413	45·204
	£	£	£	£
At 5 dollars to a pound ...	10·33	10·96	10·28	9·04
At 4·86 dollars per £, or intrinsic par	10·63	11·28	10·58	9·30

The production of the United States is evidently under-estimated. On the other hand, the future ordinary demand is much over-estimated in paragraph 130 at 10 millions sterling,—and as it has been shown that from improvements in quartz mining, and the discovery of new quartz reefs, and new mines, and from the great extension of hydraulic mining, the production of gold is on the increase, the surplus to be thrown on the markets of the West, from 1879, is not over-estimated at 14 millions sterling;—and if the various estimates of the production of silver had been regarded with less scepticism than that evinced in paragraphs 53 and 54, even a larger production than 18 millions sterling might have been assumed.

APPENDIX D.

THE EFFECT UPON THE FOREIGN TRADE, AND ON THE FINANCES OF INDIA, OF THE FALL IN THE PRICE OF SILVER.

		PARAS.
1.	The fall in the price of silver affects India unfavorably because silver is legal tender in India, and because her foreign trade is principally with countries with a gold currency.	1
2.	The fall must operate unfavorably—	
	I. As a heavy duty on imports, and as a bounty on exports.	
	II. By converting silver into a formidable competitor, as imported merchandise, with all other imports.	
	III. By causing an increase of local prices as expressed in silver, without any increase abroad of the price of Indian exports as expressed in gold.	2
	IV. As the result of the three preceding, by injuriously affecting the commerce and the finances of India.	
3.	The evil effect under the first head illustrated, more particularly by its influence in reducing imports.	3 to 6
4.	It is true that silver having fallen permanently much below its price in 1862, the intrinsic par will be altered to a reduced exchange between the rupee and sterling, and that the commercial rate, as fluctuating about this altered par, may be high, commercially, so as to favor the importation of silver into India; but not the less will the rate continue to be a low exchange between gold and silver so as to make it operate like a permanent duty on imports.	7 and 8
5.	Under the second head in entry 2 silver would be imported—1*st*, as merchandise, by conversion abroad, into silver, of the gold proceeds of Indian exports, 2*nd*; by direct importation of silver from the silver producing countries, and from the countries in Europe which have accumulated surplus hoards of silver, such direct importation being inevitable from the demonetisation of silver outside Asia, and from India being the only country in Asia which retains a fixed mint price of silver, irrespective of its depreciation abroad.	9 to 16
6.	The direct importation of Nevada silver into India would change the course of the China trade, and impose a heavy loss by exchange on Manchester for the proceeds of sale of cotton goods exported to China.	13 and 14
7.	The influx of silver, from the causes stated in entry 5, would raise prices in India without increasing the gold price abroad of Indian exports,—nay, by reason of the increased volume of Indian exports, in exchange for silver imported as merchandise, the gold prices, abroad, of the exports, may fall, while their silver prices in India must rise. This conclusion, which forms heading 3 in entry 3, discussed in detail.	17 to 52
8.	The enhancement of silver prices in India, for Indian exports, while their gold prices abroad remain unaltered or are reduced, would cause the market quotations in India of Indian exports to be exaggerated prices for foreign markets, just the same as if India had an inconvertible paper currency, and causing the same confusion in the foreign trade as occurs with that currency.	53 to 55
9.	Mr. J. S. Mills' description of the effects of an inconvertible paper currency represents exactly the results which must flow from a depreciated silver currency in India. The only differences are—1*st*, that an inconvertible paper currency is an act of the Government of the country in which it prevails, while a depreciated silver currency can exist only on the sufferance of the Government; 2*ndly*, that the evils of an inconvertible paper currency can be limited by the Government restricting the amount of issue of the inconvertible paper, whereas, with silver demonetised out of Asia, there is no limit to the extension of a depreciated silver currency in India while silver continues as legal tender.	56 to 58
10.	With a depreciated silver currency the rate of interest in India will rise.	59 to 67

	PARAS.
11. With a high rate of interest and enhanced prices in India the import trade will be affected, and on the whole there would be a restricted trade.	68 to 72
12. With enhanced prices in India the cost of producing opium would be increased without any corresponding increase of its selling price, thereby the net opium revenue would be reduced.	73
13. Summary of disastrous results to the Government, and to the country, from a greatly depreciated silver currency.	74

APPENDIX D.

THE EFFECT UPON THE FOREIGN TRADE, AND ON THE FINANCES OF INDIA, OF THE FALL IN THE PRICE OF SILVER.

IF the foreign trade of India was principally with countries which have a silver currency, it might not be materially affected by the fall in the price of silver: but the bulk of that trade is with the United Kingdom and with other countries in the West, where silver, from being demonetised, has, practically, become mere merchandise. From this circumstance, there are two distinct currents or elements of the foreign exchange between the rupee and sterling. Were the currencies in India and in England the same, then, with the present enormous excess of exports over imports, there would be a high exchange in favor of India; but the currencies differ, and hence the exchange is low, owing to the depreciation of silver. This result is due, however, not to a mere difference between the two currencies, but to the particular difference which exists, *viz.*, that by which depreciated silver is the metal of legal tender in which England can force India to accept a settlement of the balance of trade. If the difference had been the other way, *viz.*, if gold had been legal tender in India, and silver the metal in which Great Britain realised at home the proceeds of her foreign trade, the strain on England in settling with those depreciated silver proceeds, the enormous balance of a trade which, on the above hypothesis, was payable to India in gold, would have been tremendous.

2. With silver as the standard of value in India, a fall in the price of silver—

1*st*, must operate as a heavy duty on imports, and as a bounty on exports;

2*nd*, must raise a formidable competitor to the imports of all other merchandise in the article of cheap silver which, in the West, is becoming mere merchandise, whilst in India it has a higher conventional value as legal tender;

3*rd*, must cause an increase of prices in India, which will not be accompanied by any corresponding increase, abroad, of the gold prices of Indian exports;

4*th*, must in these ways affect injuriously the commerce and the finances of India.

These results are only various forms of stating the same fact; but clear ideas on the general subject will be helped by regarding the fact in these several aspects.

3. Under the first head, whenever the exchange between two currencies varies from par, it operates one way for importers, and the opposite way for exporters. Thus a pound being equal to 240 pence, we find that—

1*st*.—The exporter from the United Kingdom will get, for the silver proceeds in India of his exports, so much as one pound for every 10 rupees at the exchange of two shillings; but so little as one pound for every 12 rupees of those proceeds at an exchange of one shilling eight pence, or 20 pence per rupee. In other words, the exporter from the United Kingdom, represented, say, by Manchester, the principal exporter, and the importer in India, *lose* by a low exchange.

2*nd*.—On the other hand, the exporter from India will get for the gold proceeds arising in the United Kingdom from his exports only 10 rupees for every pound at an exchange of two shillings; but so much as 12 rupees for every pound of those proceeds at an exchange of one shilling eight pence the rupee. In other words, the exporter from India, and the importer in England, *gain* by a low exchange.

It follows, that, if there has been a fall in the price of silver, and consequently in the exchange of 10 per cent., that decline must operate like a duty of 10 per cent. on imports into India from countries which have a gold currency; and that until, say, Manchester, and the importer in India, can add this 10 per cent. to the selling price in India, thus recovering the loss by exchange, or the 10 per cent. duty, from consumers, they must divide the loss between them as best they may.

4. Conversely, the same 10 per cent. depreciation of silver, which inflicts a loss on Manchester and other exporters from England, is a gain or bounty of 10 per cent. to exporters from India. For example: through the enormous and rapid growth of the exports of cotton from the United States, the price of fair Dhollerah, in Liverpool, has fallen to what it was before the civil war, that is, to a price which gave but a feeble impulse, in 1860, to the export of cotton from India. If, therefore, the exchange between sterling and the rupee were the same now as in 1860, the export of raw cotton from India might have ceased,—more being paid for it now, than in 1860, to the cultivators in India; but the gain by exchange, from converting gold proceeds of sale of the cotton into silver, counteracts any loss which would otherwise accrue from a sale at the diminished sterling or gold price, and in this way it acts as a bounty on the export.

5. Were none of the 10 per cent. loss on imports from the depreciation of silver to be thrown on the consumer, it would have to be shared, as above stated, between the manufacturer in the United Kingdom and the first importer into India; necessarily, the import trade would collapse. On the other hand, if these two succeed in carrying on the trade, by throwing part of the loss, as they must do, upon the consumer, consumption will be checked and the import trade be restricted.

6. A decrease of imports cannot be contemplated without concern; it would increase the price of imported articles, lead to the production in this country, at greater cost, of some articles which are now more cheaply obtained from abroad, and, in short, would react on the export* trade, which must contract with a diminution of imports. Apart from the consequent disadvantage of such results to the country at large, a contracted trade would be prejudicial to, and an expanded trade is a necessity for, the Government's purpose of effecting, at a moderate cost, the largely increased remittances to the Home Government. But it has been seen that imports must be restricted by the heavy tax which a low exchange imposes on them.

7. In speaking of the present as a very low exchange, a correction must be applied, if the term be used in the sense of a commercial exchange. A commercial exchange is high or low only relatively to a recognised intrinsic par of exchange; and as this intrinsic par between the English and Indian currencies is measured by the price of silver in London, the par which was established or recognised when the price of silver was high from 1862 to 1865 has, with the subsequently diminished price of silver, become obsolete; and the intrinsic par now is permanently much below what it was in 1862 to 1865. Hence, when the commercial exchange of the present day is pronounced excessively low, it is so regarded by unconsciously measuring it by the (now ideal) intrinsic par of 1862 to 1865, when the price of silver exceeded 61 pence an ounce. Should it appear that the price of silver will never again rise above 56¼ pence an ounce, then a commercial rate of exchange near to the intrinsic par furnished by a price of 56 pence per ounce, though expressed at, say, 1*s.* 9*d.* a rupee, may yet be, commercially, such a high exchange as to favor the importation of silver into India; but not the less (at the same time) will it be such a low exchange, in the relation of value between gold and silver, as to constitute a permanent duty on imports.

8. Were the presumption correct, as has been supposed, that, after the alteration of the intrinsic par, that is, after its re-adjustment to the price of 56 pence per ounce as a fairly permanent average price, the

* A very large preponderance in value of the cheap bulky exports from India over the value of the costly imports of small bulk into India would imply so very much greater an excess in the quantity of exports over that of imports, as must raise freights by requiring ships to come to India, comparatively empty, for a homeward freight which would require to be enhanced to pay expenses out and home.

import and export trade will proceed just as if the price of silver had always stood at 56 pence, then—1*stly*, it can make no difference to the trade between England and India if the price of silver were to fall to 20 pence per ounce, and India were still to retain a silver currency; 2*ndly*, there is the fact that (in respect of the rate of exchange between the rupee and sterling) the Secretary of State—exporters to India—and importers in India—have the same interest, and that there is an enormous real increase of expenditure for remitting money for the home charges, greater by at least 9 per cent. than if the price of silver had not fallen, and that a precisely similar loss must fall on importers unless they can throw it on the consumer; 3*rdly*, that in 1862 to 1865 exporters from England to India got the price of their goods *plus* any advantage from the favorable exchange induced by the high price of silver, whereas now they have that price *minus* any disadvantage from the lower exchange attendant on the greatly decreased price of silver. The difference between the two results is a real loss or substantial difference in their profits, and a difference so large that it may reduce their profits below the English market rate of interest on their capital, in which case they must seek a trade with some other country;* or if they are able to add the difference to the price of their goods, the enhanced price must check consumption and so restrict their trade.

* Or fail, as some of the home firms are doing.

9. As bearing on the second head in paragraph 2, *viz.*, the competition of silver, as merchandise, with other imports of merchandise, in the Indian market, it has been shown in Appendix C that, from silver having been virtually demonetised outside Asia, the largest part of an annual production of 18 millions sterling of silver, and an enormous surplus hoard of 145 millions which has accumulated in Europe, will be seeking a market;—silver will be a drug in the European market, and an outlet for this immense store and annual production will be sought in Asia.

10. In a passage quoted by Professor Jevons, Professor Cairnes observed: "I had also said ('Serious Fall,' &c., page 37), having shown upon a wide basis "of facts that both gold and silver are depreciated here, I am much more in- "clined to regard this depreciation as the cause of the Eastern drain. The fall "in the value of silver, compared with most other goods, makes it more pro- "fitable to pay for Eastern produce with silver bullion than with our manufac- "tures,—silver being always acceptable among Asiatic nations." This importation of silver as merchandise would apparently be effected in two ways, *viz.*,—1*st*, through the banks, by direct export from the silver-producing countries to India; 2*nd*, through orders upon the silver-producing countries from merchants abroad to send silver to India with the view of buying Indian produce for export to a third country in which the merchants have to settle a balance, but to which a direct remittance of silver would be disadvantageous.

11. In the first case, and generally, but not always, in the second, the Indian export would be sent to a country where gold is the standard of value; and in the first case the transaction would originate with the exporter in India, who, stimulated by the bounty on exports afforded by the depreciation of silver in countries which use a gold currency (paragraph 2), would find it advantageous to export for that bounty, even if the gold price abroad were so low as to afford no profit at the old intrinsic par which prevailed between silver and gold, before silver was depreciated. The exporter would draw against his shipments, selling his bill to an Indian bank, the home agency of which would ship silver to India to replace the capital with which the Indian bank parted for the purchase of the bill. Or if the Indian exporter adopted the cash method of business, which, it is believed, prevails with the Greek merchants, he would instruct his home correspondent to turn the gold proceeds of the sale of the export into silver and to ship the silver to India. In this transaction the silver would be imported as merchandise, *viz.*, for the bonus or profit arising from its purchase in London at a cheap price, with the gold proceeds of the export, and its importation into India at the higher conventional price which silver bears in the currency of India. Transactions of this kind would be continued so long as the percentage of fall in the price of silver abroad, qualified by any decrease of price in the foreign market consequent on the increased exports, exceeded the percentage of rise in price in India of the articles of Indian export.

12. The second case supposed in paragraph 10 would be somewhat different. The produce of the gold mines in California and Australia, beyond the portion detained for home consumption or diverted to China, goes principally to London, and is thence distributed to the markets of the world, because, hitherto, London has been the largest market where gold fetches a fixed price of £3-17-9 pence per ounce standard, and because England exports articles which are in request in the gold-producing countries. In like manner, on silver being demonetised in the West, Asia will be the only continent where silver will have a fixed price, and there being no mint in China to fix the price of silver in that Empire, India, if she retains a silver currency, will be the only part of the world where silver will have a fixed price.

13. Thus, as regards offering a fixed price for the metal, India will hold the same relation to the silver-producing countries which England now occupies towards the gold-producing countries;—and, though Indian exports may not be as much wanted in the silver-producing countries as British manufactures are sought in California and Australia, yet not the less will the produce of the silver mines be attracted to India. It is perfectly conceivable, for instance, that the United States, which now send their Californian gold, chiefly to England, in settlement of a balance of trade, might find it advantageous to divert a large part of it to the Continent, and to make up the short remittance to England by sending a corresponding amount of Nevada silver to India for the purchase of opium, the dollar proceeds of which would be converted into shipments of tea to the United Kingdom,—thus cancelling America's debt to England. This would entail a loss on Manchester, because cotton goods on the one side, and silk and tea on the other, are the principal articles of exchange in the trade between China and the United Kingdom; and when the Chinese export of tea and silk is diverted, in the manner stated, to settling an account between the United States and Great Britain, there will be an increased loss by exchange to Manchester, in getting back to England the silver proceeds of sale of her cotton goods in China; for the silver which is now shipped by China to India for settling the debt for opium would be sent instead to England in payment of cotton goods,—the payment for opium being taken up by the United States against America's shipment of tea and silk from China to Europe.

14. Even Manchester, which had previously confined its business to cotton goods, was driven lately to the expedient of turning the Indian proceeds of the cotton goods into an export to China, and there into a fresh export of tea or silk to Europe, as a means of avoiding the loss by exchange in getting back the Indian proceeds of the cotton goods by a more direct transaction. The loss from a change in the course of trade with China, when silver is demonetised in Europe, will be serious.

15. A direct shipment of silver from Nevada to China would not be as advantageous as the transaction above described; because, silver not having a fixed price in China, local prices of tea and silk would rise in direct proportion to the increased importation of silver, whereas the selling price of opium would not rise in Calcutta from the importation of Nevada silver into India, for there would be no corresponding rise in China, nor any gain by exchange on the export of opium to the silver-using Empire of China.

16. The foregoing is only one illustration of how the best part of the 18 millions of silver production, and the hoard of silver which has accumulated in Europe, would be imported into India, by reason of the fixed mint price, at one time for an export of opium to China, at another time for an export of jute to England, and the like, until a large part of the Indian exports, which now exchange for European manufactures, would then exchange for silver,—thus establishing the position, that, with silver demonetised outside Asia, and continuing as the standard of value in India, it will, as mere merchandise, become a formidable competitor of all other merchandise imported into India.

17. Thus, from both the causes stated in the close of para. 10, there will occur an influx of silver into India far beyond what would be required for settling a balance of trade were silver not demonetised and depreciated outside Asia; and, accordingly, there would be a considerable rise of prices in India,

without any increase abroad, of the gold prices of Indian exports. This is the conclusion stated under the third head in paragraph 2; but as the subject is of great moment to India, perhaps a further discussion of it may be useful.

18. The elementary principles on this difficult subject will be found in Mr. J. S. Mill's chapters on the "ultimate analysis of cost of production" and on "international values." In the former of these he shews that labor is the main constituent of the cost of production: that there are, indeed, other elements, but that such of these as do not resolve themselves into labor are of very secondary importance; and that, accordingly, in general reasoning on prices, the cost of labor is principally regarded.

19. In the chapter "on international values" he shews that, whereas, in any one country, articles of that country interchange with one another according to their respective costs of production, the case is altered when different countries interchange their products. In this latter case, the imported article exchanges, not according to the cost of its production, but according to the cost of production of the export for which it is given in exchange.

20. In illustration, Mr. Mill supposes a case in which the same amount of labor produces 10 yards of broadcloth in Germany and in England, while other labor, equal in amount to the preceding, produces 15 yards of linen in England and 20 yards in Germany. In such a case (Mr. Mill shews)—

I.—Germany would discontinue the making of the 10 yards of broadcloth, and with the labor thus set free would make 20 yards of linen for exchange with English broadcloth. On the other hand, England would discontinue making 15 yards of linen, and with the labor thus set free would make extra 10 yards of broadcloth for exchange with Germany for her extra 20 yards of linen. The higgling of the market would perhaps eventually fix the interchange at 10 yards of English broadcloth for 17 yards of German linen.

II.—At the foregoing rate of exchange, Germany, it is assumed, is willing to take only 1,000 times 10 yards of broadcloth, and England is willing to take only 1,000 times 17 yards of German linen. The trade would then be equal at those quantities and rates.

III.—But it is next supposed that Germany wants, as above, 1,000 times 10 yards of broadcloth, while England will not take more than 800 times 17 yards of German linen at the rate of 10 yards of broadcloth for 17 of linen. In this case, Germany could get only 800 times 10 yards of broadcloth for the 800 times 17 yards of linen, which alone England will take at the existing price. Accordingly, Germany offers her linen at a cheaper price; and at the cheaper price England is induced to take 900 times 18 yards of linen (the cheaper price) which enables Germany to obtain 900 times 10 yards of broadcloth. [In this case, Germany, desiring to increase her imports (of broadcloth), has to offer her exports (linen) at a cheaper price.]

IV.—Or, the converse case is supposed, of England wishing to import 1,200 times 17 yards of linen, while Germany at the existing price will not take more than 1,000 times 10 yards of broadcloth. Accordingly England has to offer 10 yards of broadcloth for less than the original (I) 17 yards of German linen. This induces Germany to take more than 1,000 times 10 yards of broadcloth at the cheaper price. Here, as in the previous case (III), Germany increases her imports; but as she did not, in the outset, desire or initiate the increase, the extra price falls on England, and Germany's exports exchange at a higher price, and in a necessarily diminished quantity, for the enlarged quantity of imports.

21. From the foregoing it appears that—

Sections I and II of preceding para.

I.—In foreign trade there is interchange of certain quantities of two articles which are produced by the same amount of equally skilled and effective labor, but of which the imported article could not be produced by the country which imports it without a greater amount of labor.

Section III of preceding para.

II.—When a country increases her imports under circumstances in which the extra supply originates in a demand from her, she must offer her exports in exchange at a cheaper rate.

III.—When a country increases her imports under circumstances in which the extra supply originated in a demand from abroad for her exports, and is given to her in exchange for the additional exports, the price of the exports will increase.

Section IV of preceding para.

22. Reverting to the illustration in paragraph 20, Sections I and II, it may be supposed, in accordance with the actual facts, that there is no direct barter of broadcloth for linen, or of the labor expended on the one for the labor expended on the other; but that a merchant in Germany buys the English broadcloth for the amount of money which represents the value of the German labor on linen, and a merchant in England buys the German linen for the amount of money which represents the value of the English labor on broadcloth. The following assumptions may also be made, *viz.*:—

1*st.*—That 100 days' labor was employed in the production of the 10 yards of English broadcloth and the 20 yards of German linen, and that there was no variation, through the higgling of the market, from the rate of interchange of 10 yards of broadcloth for 20 of linen.

2*nd.*—That any such expedients as bills of exchange* were unknown.

3*rd.*—That Germany has a silver currency, say rupees, and England a gold currency.

4*th.*—That the transaction occurred in 1862, and a precisely similar transaction in 1875, and that one pound of silver represented in 1862 the value in Germany of 100 days' German labor, and that it purchased in that year sufficient gold in England to pay for 100 days' English labor.

23. The English employer of the 100 days' English labor would tell the German merchant, you must pay me in gold, or in so much silver as will enable me to buy the quantity of gold which is required for paying for 100 days' English labor.

24. The German employer of the 100 days' labor would tell the English merchant, I must, perforce, accept payment in silver, that being the legal tender in Germany.

25. In 1862 Germany would have acquiesced in this arrangement, because, on the 4th assumption in paragraph 22, the pound of silver sent† to her by the English merchant for 100 days' German labor on linen would, when returned to England in payment for 100 days' English labor on broadcloth, buy a quantity of gold equal to the value of the 100 days' labor.

26. In 1875, however, the price of silver has fallen relatively to gold (but not relatively to labor or to merchandise), say 10 per cent. below the price in 1862. The English merchant would still send one pound of silver in payment of 100 days' German labor on linen; but were Germany to send back the same pound in payment of 100 days' English labor on broadcloth, it would buy 10 per cent. less than the quantity of gold required to pay for the 100 days' labor.

27. The German importer of English broadcloth would be in this difficulty, that he has to pay for 100 days' English labor on broadcloth, and that whereas, in 1862, silver representing 100 days' German labor paid for the 100 days' English labor in gold—in 1875, silver representing 110 days' German labor must be provided for that payment.

28. In this difficulty, Germany would avoid a direct interchange of linen for broadcloth by selling the linen in England for the equivalent in gold of 100 days' German labor. Silver, equivalent to 110 days' German labor, could

* The rate of bills of exchange, as expressed by the premium or discount offered, is affected by unequal imports or exports. In the present illustration, the imports and exports are supposed to exchange as representing equal amounts of labor. In the rate of exchange the intrinsic par of gold and silver at the market price of silver is regarded; but this has been taken into account in Section 4. The cost of transmission from one country to the other is also regarded, but in Mr. Mill's illustration the cost of transmission is judiciously put aside for convenience of exposition. Hence this 2nd assumption is properly excluded for the present purpose of illustration.

† In Mr. Mill's illustration it is assumed, for convenience of exposition, that there is no expense for transit in the exchange or interchange between the two countries.

then, if need were, be bought with the gold; and thus (out of the original 100 days' German labor on linen, and without any increase of its price to the English consumer) the means would be obtained of laying down in England, as the payment for 100 days' English labor on broadcloth, the amount of silver (equivalent to 110 days' German labor) which will purchase gold equivalent to that 100 days' English labor.

29. But the extra silver, equal to ten days' German labor, which has been gained in England on the linen, belongs to the exporter of the linen; and the German importer of English broadcloth must buy it, in Germany, from the exporter of the linen, in order to pay for the 100 days' English labor on broadcloth. To effect this purchase, he must exchange, in Germany, his broadcloth, the produce of 100 days' English labor, for some other article or for money, the equivalent of 110 days' German labor. In other words, the German importer of the broadcloth must sell it at an advance, in price, of 10 per cent., though the English exporter of the cloth has not increased his price by one farthing.

30. At this stage, the German exporter of the linen is the reaper of the special gain by exchange of 10 per cent. from the fall in the price of silver in London. The German manufacturer of the linen, who supplies the exporter, may not see this at first, but those engaged in the export trade will know of it; and, through competition, the gain will eventually pass to the linen manufacturer in an increased local price of linen, without its price being increased, abroad, to the English consumer.

31. But when the linen manufacturer gets a higher local price for the linen which is exported from Germany, perforce the linen which is consumed in the country will also rise in price. To pay this extra price, the consumers at home must in turn raise the price of articles which they sell, or, if they are capitalists, who neither buy nor sell goods, but merely lend on interest, they must raise the rate of interest, under the double pressure of an increase in the price of imports as well as of exports.

32. In short, the fall in the price of silver abroad, relatively to gold, will cause a general rise in prices as expressed in labor, in the country which has a silver currency, but without raising the cost price of her imports and the selling price of her exports, as expressed in gold, at the places abroad where she respectively buys and sells them.

33. But when local prices of both imports and exports are increased at home, without any increase whatever of prices abroad—as the consequence of a depreciation, abroad, of the metal which forms the currency—it follows that *for foreign trade* those local prices are exaggerated prices, as regards exports; and that arbitrated prices, derived from the local prices and from the rates of exchange, are the real local prices of exports, which have to be compared with prices abroad.

34. It will be useful to illustrate this in another way. The coin of legal tender in a country passes in that country (*i. e.*, in local transactions) for the nominal value thereof which is stamped on it. The law fixes the quantity and fineness of the precious metal in the coin, and, so long as the coin is thus constituted, and is received by Government in payment of taxes, and as legal tender between individuals, it has a conventional value in the country, as legal tender, quite irrespective of the intrinsic price abroad of the quantity of fine metal which is contained in the coin. Any one will freely receive the (say silver) coin from another, at its nominal value, without troubling himself about the price of silver abroad, because he can pass it on to the next person, or pay it to the Government for taxes, at the same value.

35. Prices in the country being expressed in the coin of legal tender, they indicate the quantities, of the respective articles, which must be offered for the conventional value of that coin. In other words, the local price indicates what quantity of the article must be offered, in the country, for the quantity of fine metal in the coin of legal tender, at the conventional value of the coin.

36. Thus far, we have three prices, *viz.*, the fine metal in the coin of legal tender—1*st*, at its conventional value in the country in which it is legal tender; 2*nd*, at its intrinsic price abroad; 3*rd*, the price of any article, in the silver

coin country, as measured by the nominal or conventional value of the coin of legal tender.

37. If the country has no trade, by sea or land, with a foreign country which uses coin of a different metal, or if (having a foreign trade) No. 2 in the preceding paragraph agrees with No. 1, then, so long as that agreement lasts, the price of articles (No. 3) as expressed in the conventional value (No. 1) of the coin of legal tender will not vary, except with the demand for the article,—with the supply of it,—or with the greater or less amount of money in circulation.

38. But should the intrinsic price of silver abroad fall below the conventional value of silver in the country where silver coin is legal tender, then the local price of articles, as measured by the conventional value of that silver coin (No. 3 in paragraph 36), will in due course be re-adjusted to the intrinsic price of silver abroad.

39. In illustration of this, let it be supposed—

(1*st*) that the prices of articles in India and in England are the same now in 1875 as they were in 1862;

(2*nd*) that the price of silver in London was the same in and down to 1874 as in 1862; and

(3*rd*) that the conventional value of the rupee in India was the same in 1862 as the price of silver in London; in other words, that

(4*th*) the quantity of any Indian export which in India would have purchased a certain quantity of silver at the local value of the rupee, would in England have purchased in 1862 the same quantity of silver, *plus* merely an equivalent for the cost of transit and the ordinary profits of trade.

40. In 1875 the local price of Indian exports, and their price in the London market, continue the same as in 1862 on the above hypothesis: but in 1875 (let us suppose) the price of silver in London suddenly falls 10 per cent. below the price at which it had stood from 1862 to 1874,—without any immediate increase or decrease of the prices of Indian exports in India or in England.

41. As the local price of Indian exports is unchanged, a given quantity of any one of those exports will still purchase in 1875, in India, the quantity of fine silver which it purchased at the conventional value of the rupee from 1862 to 1874; but in England it will purchase a quantity of silver additional by 10 per cent. to what it commanded there from 1862 to 1874, the intrinsic price of silver having fallen 10 per cent.

42. This additional purchase of silver abroad by the old quantity of Indian export does not imply an increase of price in London for the export. On the hypothesis assumed the price of the export, as payable in London in gold of legal tender, remains unaltered; so that neither the importers there nor the consumers who buy from the importers pay a farthing more. It is when the gold proceeds of sale of the export are employed in buying silver, which has fallen 10 per cent., that the Indian export purchases in London in 1875 10 per cent. of silver additional to the quantity of silver which it purchased from 1862 to 1874.

43. Thus,—consequent on the fall of silver by 10 per cent. in 1875,—there is a gain by exchange of 10 per cent. on the export from India; but this gain is not obtained from the London importer or consumer.

44. And up to this stage the gain has not accrued to the producers in India: it remains with the exporter from India; and it will continue with him until the local price of the export, as measured by the conventional value of the rupee in India, is increased by 10 per cent.—or in other words, until the conventional or local value of the rupee, relatively to all other prices in India, is reduced by 10 per cent. in harmony with the corresponding fall in the intrinsic price of silver in London.

45. This correction of the conventional prices in India by the amount of depreciation of silver in London will ensue from the competition for the

exceptional gain by exchange of 10 per cent., which, thus far, has remained with the merchants who were in possession of the export trade at the time of the sudden fall in the price of silver by 10 per cent.

46. Those who may wish to compete for this gain by exchange with the original possessors of it must buy the articles of export out of which the gain arises. They must accordingly offer an enhanced price to producers; and thus, eventually, though gradually, the original gain by exchange, as existing in 1875, would be added to the local prices of the exports, as measured by the conventional value of the rupee. In other words, the conventional value of the rupee, in reference to the exports which have been raised 10 per cent. in local price, will be reduced by a corresponding 10 per cent.

47. The gain by exchange (excepting the portion which may remain with the merchant through the higgling of the market) has now passed from the merchants who export to the producers of the exports; but it will not remain with the latter. Every producer of some one article of export is a consumer of some other article of export, the price of which will have been raised 10 per cent.; or he is a consumer of articles of import which, with the fall of 10 per cent. in the price of silver, will have increased by 10 per cent. (paragraphs 29 to 32); or (if he be above the lowest class of producers) he employs laborers whose wages must be increased, because the articles of import or export which they consume have risen 10 per cent. in price. Thus the gain by exchange on exports will, indeed, remain with the producer, in the sense of its having been added to the price of the exports supplied by him; but, *per contra*, he must pay a corresponding amount extra for all articles of import or export other than his special export. He will not be any richer than before he secured the gain by exchange: at the same time the gain will prevent his becoming poorer, through increase of wages, and through the increased price of imports and of other articles.

48. In short, the 10 per cent. fall abroad in the price of silver will raise general prices in the silver coin country by 10 per cent. Inasmuch, however, as the importers of goods experience at once the loss by exchange, the loss will be added to the price of imports more quickly than gain by exchange on exports can be added (through the slower process of competition with and among exporters) to the prices charged by producers of the exported articles. And if the article of export has to encounter competition in the foreign market, then the exporter may be forced to reduce his selling price, in that market, by some amount within the margin of his 10 per cent. gain by exchange; and to that extent the gain will not be available for division with the producer. This is, perhaps, the case just now with Indian cotton, which is selling in Liverpool at a very low price, because, apparently, the exporter is compensated by a large gain in exchange.

49. Through this earlier effect of the depreciation of silver upon the prices of imports, than upon those of exports, and on certain other considerations, there will not be an exact balancing of the loss, by the gain in exchange—nor will there be an addition of exactly 10 per cent. to local prices, though, for convenience of exposition, this has been assumed. For—1*st*, the home or internal trade is greater than the foreign; 2*ndly*, of certain articles of export more is consumed in the country than is exported: and conversely, though in a much less degree, certain articles of import are supplemented by local manufactures of the same articles; 3*rdly*, a large class of consumers of imports and exports do not sell goods, and until a general increase of salaries and wages, their consumption of articles would decrease; 4*thly*, from the immediately preceding cause, enhanced local prices will cause increased expenditure for salaries necessitating increased taxation; 5*thly*, the rate of interest would rise, and though in doing so it might draw out for investment some of the hoarded treasure in the country, yet, eventually, as the annual savings in the country which seek investment fall short of requirements, capital must be attracted from abroad, and the rate of interest will be yet higher on account of loss by exchange in remitting dividends to investors abroad. This rise in the rate of interest would act both on the import and export trade.

50. Hence, in the case supposed of a sudden fall, in 1875, by 10 per cent. in the price of silver, which had been stationary from 1862 to 1874, an unequal

disturbance of prices of imports and exports would modify the direct effect of the fall in raising local prices in India by 10 per cent. The contingencies above stated would, however, be generally restrictive of consumption or of trade, whilst the enormous home disbursements, and the exchange of Indian exports for silver which will have been imported as merchandise (paragraphs 16 and 17), and for a large proportion of necessaries from abroad, would throw on India the initiative in increasing the trade by offering her exports abroad at a cheaper price (paragraph 21, Section II).

51. But, all allowances made, there would be a considerable rise of local prices in India from the fall in the price of silver, without any increase from that cause, at places abroad, of the prices at which India there buys her imports and sells her exports; nay, as shewn above, the gold price of her exports abroad would decrease, while the gain by exchange on exports from India, and the loss by exchange on imports, consequent on the sudden reduction of the price of silver by 10 per cent., will have been absorbed in the increased local prices.

52. But so long as silver remained at its diminished price, the quotations of exchange, say of 1885, between sterling and Indian money, would continue to shew the same loss or gain by exchange as in 1875, as if it had not been absorbed in the interval in increased local prices of merchandise. There would, however, be an essential distinction in the quotations of the two periods. In 1875, the 10 per cent. loss to importers has yet to be added to local prices, and meanwhile it is an abatement from the importer's profit; in 1888, from having been added in the interval to local prices, the same loss would no longer reduce that profit, though, by restricting consumption, it will have reduced the amount of the importer's business. Again, in 1875, the gain by exchange to exporters (a gain not paid by England, but arising from the importation —or from bills which are equivalent to an importation—of depreciated silver into India) is a profit outside English and Indian prices of the exports, which the exporter reaps and retains; but in 1885 that gain has been absorbed in enhanced local prices, without any increase of prices abroad;—so that when the exporter's goods, bought in India at the enhanced local silver prices, sell in England at the old prices of the London market, expressed in gold, he, thus far, sustains a loss at the par of exchange which prevailed before the 10 per cent. fall in the price of silver; but he—unless the gold price abroad has fallen—recovers this loss through the gain by exchange in converting the gold proceeds of his exports into depreciated silver for India. In other words, in 1875, the quotations of gain to the exporter, in the sterling exchange, represent a real but casual addition to his profits, which the producers have not had time to take away from him in enhanced local prices of the exported articles; but in 1885 the same gain simply represents the deferred receipt, or the discounted amount of the deferred receipt, by which he must repay himself for his loss in buying his exports at a local price expressed in silver, higher than the market price in London which is expressed in gold.

53. To put the matter in another form. The local prices, as enhanced by the 10 per cent. fall in the price of silver, include a too true and real addition to the former price of imports; but, because they are local prices, that is, prices payable only in India in silver, in consequence of their being measured, there, by the conventional value of silver in the coined rupee of legal tender, they are inoperative abroad, where the exports from India are sold at gold prices. As quotations for foreign markets where gold prices are current, these enhanced local prices would, for exports, be exaggerated prices. A merchant wishing to know whether it would pay to export an Indian production to the London market at the enhanced local price of the article, as expressed in silver, would, for ready reckoning, turn the rupee price into sterling at two shillings per rupee, take off the percentage of gain by exchange, and then compare the residual sterling price with the market price in London.

54. Were the price of silver abroad to fall 50 per cent. instead of only 10, the result would be the same; local prices, and the gain by exchange for exporters, would be increased in the same proportion; a larger percentage would be taken off the local price in arbitrating it for the foreign market, but the result for the foreign export trade would be precisely the same

as with the lesser depreciation of 10 per cent., except in so far as the gold price of the article in the foreign market many have fallen through increased exports of it.

55. In short, the effect in India of a considerable fall in the price of silver abroad, in increasing local prices, and rendering them exaggerated quotations for exports for foreign markets, with a gold currency, must be precisely the same as if Government were to introduce an inconvertible paper currency. Mr. J. S. Mill, writing of an inconvertible paper currency, observes: "When the paper begins to exceed in quantity the metallic "currency which it supersedes, prices, of course, rise; things which were worth "5*l.* in metallic money become worth 6*l.* in inconvertible paper, or more, "as the case may be. But this rise of price will not, as in the cases before "examined, stimulate import and discourage export. The imports and exports "are determined by the metallic prices of things, not by the paper prices—and "it is only when the paper is exchangeable at pleasure for the metals that "paper prices and metallic prices must correspond.

"Let us suppose that England is the country which has the depreciated "paper. Suppose that some English production could be bought, while the "currency was still metallic, for 5*l.*, and sold in France for 5*l.* 10*s.*, the difference "covering the expenses and risk, and affording a profit to the merchant. On "account of the depreciation, the commodity will now cost in England 6*l.*, "and cannot be sold in France for more than 5*l.* 10*s.*, and yet it will be "exported as before. Why? Because the 5*l.* 10*s.* which the exporter can get "for it in France is not depreciated paper, but gold (compare with paragraph "54) or silver; and since in England bullion has risen in the same proportion "with other things,—if the merchant brings the gold or silver to England, "he can sell 5*l.* 10*s.* for 6*l.* 10*s.*, and obtain, as before, 10 per cent. for profit "and expenses.

"It thus appears that a depreciation of the currency does not affect "the foreign trade of the country: this is carried on precisely as if the currency "maintained its value. But though the trade is not affected, the exchanges are. "When the imports and exports are in equilibrium, the exchange in a metallic "currency would be at par:—a bill on France for the equivalent of five sovereigns "would be worth five sovereigns. But five sovereigns, or the quantity of gold "in them, having come to be worth in England 6*l.*, it follows that a bill on "France for 5*l.* will be worth 6*l.* When, therefore, the *real* exchange is at "par, there will be a *nominal* exchange against the country of as much per cent. "as the amount of the depreciation. If the currency is depreciated 10, 15, or 20 "per cent., then, in whatever way the real exchange, arising from the variations "of international debts and credits, may vary, the quoted exchange will "always differ 10, 15, or 20 per cent. from it. However high this "nominal premium may be, it has no tendency to send gold out of the country, "for the purpose of drawing a bill against it, and profiting by the "premium; because the gold so sent must be procured, not from the banks and "at par, but in the market, at an advance of price equal to the premium. In "such cases, instead of saying that the exchange is unfavorable, it would be a "more correct representation to say that the par has altered (compare with "paragraphs 7 and 8), since there is now required a larger quantity of English "currency to be equivalent to the same quantity of foreign. The exchanges, how-"ever, continue to be computed according to the metallic par. The quoted ex-"changes, therefore, when there is a depreciated currency, are compounded of "two elements or factors—the real exchange, which follows the variation of in-"ternational payments, and the nominal exchange, which varies with the depre-"ciation of the currency, but which, while there is any depreciation at all, must "always be unfavorable. Since the amount of depreciation is exactly measured "by the degree in which the market price of bullion exceeds the mint valuation, "we have a sure criterion to determine what portion of the quoted exchange, "being referable to depreciation, may be struck off as nominal: the result, so "corrected, expressing the real exchange."

56. In an inconvertible paper currency the depreciation of the standard of local or conventional value is brought about by the local Government substituting paper, that has an inferior value or no value abroad, for the precious

metal of legal tender which retains its usual value abroad. In the silver currency of India, however, the quantity and fineness of the silver in the coin of legal tender are scrupulously maintained, exact and unimpaired,—and the standard of local or conventional value is depreciated by the fall abroad in the price of silver. On this account the test or evidence of the depreciation is the converse, in Mr. Mill's illustration, of what it is in India. In his illustration, the price of gold not having altered abroad, the depreciation of the standard of local or conventional value is measured by the *premium* on bills in countries abroad, or by the excess of the market price of gold over the mint valuation. In India, the diminished price of silver abroad having caused the depreciation of the standard of conventional value in India, the test of the depreciation is of an opposite character, *viz.*, the discount, or low exchange abroad on bills on India.

57. Allowing for this difference, the quotation from Mr. Mill, about the effects of an inconvertible paper currency, exactly describes the effects on local prices, and on the quotations of exchanges and prices for foreign markets, which, as discussed in preceding paragraphs, must occur in India from the retention of silver as the currency of legal tender while it has depreciated abroad. Hence, the arguments which have stamped a universal condemnation on an inconvertible paper currency must equally condemn the retention, for the metallic currency, of a metal which, since its adoption as legal tender, and of late years, has largely depreciated abroad. In neither case can private effort or enterprise correct the evils arising from the depreciation of the standard of local or conventional values; and the only differences are—1*st*, that, in the case of an inconvertible paper currency, the evils are produced by an act of the Government, whilst, in the other case, they originate abroad, but are continued or perpetuated through the sufferance of the Government; 2*nd*, that the evils of an inconvertible paper currency can be restrained by the Government limiting the amount of issue of inconvertible paper, whereas the Government is in one sense powerless to prevent an unlimited extension of a depreciated silver currency, while silver is demonetised outside Asia, and continues legal tender in India.

58. Thus far, it has been seen that the 10 per cent. gain by exchange on Indian exports to the places abroad where silver is depreciated 10 per cent. must involve an increase of prices in India, as measured by the conventional value of the coin of legal tender,—also, that this increase of price must pass from the merchants engaged in the export trade to the producers who sell to them, and to the laborers whom the producers employ. But the wages of current labor, and the manager's remuneration, do not alone determine the cost of production. Interest has to be added, on the capital required, for (1*st*) the food and clothing of the laborers until sale of the produce, (2*nd*) for seeds (for agricultural produce) or for raw material (for manufactures), (3*rd*) for implements, buildings, and other stock and block. Under the first two heads, the advances of capital recur annually; under the third head, whenever the implements, &c., are repaired or renewed, or are increased or extended.

59. Owing to the depreciation of the conventional standard of value, the local price of seed, and of food and clothing for laborers, will have increased; accordingly, a larger amount of capital will now be required for the same amount of production as before:—supposing this capital to be borrowed, there will be a demand for a larger amount of loans, while the efficiency of the old amount of supply of money of legal tender with money-lenders will certainly not have increased with the depreciation of the standard of conventional value. Accordingly, the rate of interest will rise. Inasmuch, however, as interest is a form of profit, and as profit on any capital comes out of the amount produced by the labor which that capital employed, and as the amount produced will not have increased in price beyond the total rise in price due to the depreciation of the standard of local value, it follows that the producer who sells to the exporter, and the laborer employed by the producer, must share the total increase of local price with the capitalist, by allowing him higher interest for his money.

60. This result of a depreciation, abroad, of the metal which is the coin of legal tender and the standard of conventional value at home is also that which Mr. Mill ascribes to an inconvertible paper currency. "Suppose money to be in

process of depreciation by means of an inconvertible currency issued by a Government in payment of its expenses. This fact will in no way diminish the demand for real capital on loan; but it will diminish the real capital loanable, because, this existing only in the form of money, the increase of quantity depreciates it. Estimated in capital, the amount offered is less, while the amount required is the same as before. Estimated in currency, the amount offered is only the same as before, while the amount required, owing to the rise of prices, is greater. Either way the rate of interest must rise. So that in this case increase of currency really affects the rate of interest, but in the contrary way to that which is generally supposed—by raising, not by lowering it."

61. Mr. Mill adds, it is true, that "the depreciation of currency, when it has become an accomplished fact, affects the rate of interest in no manner whatever. It diminishes indeed the power of money to buy commodities, but not the power of money to buy money. If a hundred pounds will buy a perpetual annuity of four pounds a year, a depreciation which makes the hundred pounds worth only half as much as before has precisely the same effect on the four pounds, and cannot, therefore, alter the relation between the two. The greater or smaller number of counters which must be used to express a given amount of real wealth makes no difference in the position or interests of lenders or borrowers, and therefore makes no difference in the demand and supply of loans. There is the same amount of real capital lent and borrowed; *and if the capital in the hands of lenders is represented by a greater number of pounds sterling, the same greater number of pounds sterling will, in consequence of the rise of prices, be now required for the purposes to which the borrowers intend to apply them.*"

62. In other words, the quantity of labor and the amount of production being the same after as before the depreciation of the currency, the rate of profit is not altered; and accordingly, on Mr. Mill's view, though, during the process of depreciation, the amount demanded as loan will, by reason of that depreciation, have increased, without as rapid an increase of the money available for loan, thus raising the rate of interest, yet *the money available for loan* will eventually increase, and thus restore the original equation between the demand and supply of loans,—or, in other words, restore the old rate of interest.

63. Supposing that before the depreciation, 50 millions of capital based on metallic currency were employed on production, and that, consequent on the depreciation, 55 millions are required, the demand by borrowers for the additional 5 millions would raise the rate of interest. But it is assumed in the preceding quotation that, eventually, the 50 millions originally lent out in money based on a metallic currency would rise in value to 55 millions worth of paper money, and that then the interest would fall to the old rate. But in India the depreciation of silver would not increase the amount of loanable capital,—whilst borrowers could not call forth any hoards of silver in the country at the old rate of interest, seeing that it had failed to attract the hoards even before silver had depreciated. Hence, in India, the additional 5 millions must be obtained from outside the supply of the existing 50 millions; and, as the old rate of interest had failed to attract the additional 5 from abroad, necessarily a higher rate must be given, for, moreover, the additional reason that the foreign capital which India can attract must come from gold-using countries, and that, as the interest would be payable in silver, the lenders would discount in the form of higher interest, not only the loss by exchange at present incurred in withdrawing that interest from India, but also the additional loss to be apprehended from a further fall in the price of silver.

64. There cannot, however, be one rate of interest for money from abroad, and another for the money already in the country; and the rate of interest on the entire amount lent for private enterprise would be raised on the next renewal, which is always at short dates;—but to those who had invested in the Public Debt interest would not be raised on the past borrowings.

65. An increase of interest, by adding to the cost of production, must diminish other profits from the article produced, until the amount of production

and consequently the demand for capital are reduced;—in which case the old equation between the demand and supply for loans and the old rate of interest would be restored.

66. The conclusions seem to be—

1st.—That in consequence of the increase of local prices from the depreciation of silver, the old amount of production will require the advance of a larger amount of money.

2nd.—That the existing capital employed on the old amount of production would, in the outset, have to meet the additional demand, and accordingly interest would rise.

3rd.—That the enhanced interest would attract capital from abroad, or from the hoards in the country; but though, thereby, the greatly increased rate of interest in No. 2 would be reduced, still the general result, for the whole amount of loan to private enterprise, would be a rate higher than the old rate;—for, otherwise, the additional money required for the old amount of production would not have been attracted.

4th.—That if the rate of profit could not afford this additional rate of interest, then the old amount of production would be reduced, —the additional capital would not be wanted, and the old rate of interest would be restored, but for a diminished amount of production.

67. Thus if, with a greatly depreciated currency, it is desired to maintain the old amount of production and of exports, the local rate of interest must be raised; and if the rate of interest rise, the imports into the country will be injuriously affected, in a measure; for the foreign exporter to India, who draws bills against his shipments at three or six months' usance, has to allow, in the price of the bills, for interest until their maturity. As the bills are payable in India, and as purchasers thereof, if wishing to realise, must discount the bills in India, the rate of interest reckoned is the Indian rate; and the increase of that rate will be an additional burden on the imports into India.

68. What chance is there of India being able to transfer to other countries the additional expense or cost with which her import trade must be burdened by the great depreciation of silver? Little or none. Like every other country, India imports only what she needs, and only because she cannot produce the imported articles, or could produce them only at greater cost. Hence, imports are the best form of exchange for her exports: failing a return of this kind, there would—*1st*, be an import of treasure, which, if it passed into circulation, would raise prices; and *2ndly*, the articles hitherto imported would have to be locally produced at greater cost.

69. India cannot evade the loss by exchange by seeking her imports from some silver coin country; for the articles she needs are produced cheapest at the existing sources of supply, which are either gold coin countries, or countries which mostly obtain a settlement through the United Kingdom, which has a gold currency.

70. Nor can she add the loss by exchange on imports to the gold price of her exports,—this price being governed by the demand abroad, by competition with other countries in the foreign market, and by the cost of production abroad of the articles exchanged for her exports, which cost is not affected by the depreciation of silver.

71. Hence, the import trade, which has been unpromising for some time, will be restricted, further, by the addition to local prices in India, on account of the depreciation of silver, and by the increase of the local rate of interest from the same cause. The total decrease of the import trade will react on the export trade, through a rise in freights; but, thus far, there would be a larger decrease of imports than of exports. On the whole, there would be a restricted trade, except so far as the export trade would be stimulated by large imports of silver as merchandise.

72. It is shown in Appendix B, paragraph 60, that when local prices rose in the United States from a depreciated paper currency, the consequent rise

in prices of necessaries was greater than the rise in wages, and that the condition of the laboring classes was worse from the inflation of the currency than before the war. That result ensued from the issue of an inconvertible paper currency which, though excessive, had yet been greatly reduced at the period of Mr. Wells' report; whereas, in India, with silver demonetised outside Asia, yet continuing as legal tender, the increase of a depreciated silver currency will be unlimited,—Government being powerless to prevent it, except by demonetising silver. The injury will not be confined to the people of India, but will also affect the finances,—not only by compelling an increase of salaries, owing to an enormous rise in prices, but, from the same cause, by reducing the net opium revenue. With a great rise in prices, from a heavy fall in the price of silver, the cost of producing opium, both Bengal and Malwa opium, must largely increase. In the case of other Indian exports, which go to gold-using countries, the increased local cost of production will be met from the gain by exchange on the gold proceeds of the exports; but with opium, which is exported to the silver-using Empire of China, no such gain will accrue; and the increase of cost of production will reduce, by its full amount, the net opium revenue.

73. Thus, for the Government, a greatly diminished price of silver, a restricted trade, and the increase of local prices in India would mean—

(1).—A heavy loss by exchange.

(2).—Diminished earnings of the Guaranteed Railways, *i.e.*, increase of charge for guaranteed interest, less net traffic receipts.

(3).—An increase in the rate of interest on the loans which are annually raised for Public Works Extraordinary.

(4).—Increase of salaries and of military expenditure, to be met by increase of taxation; and a diminished net opium revenue.

For the country at large they would mean—

(5).—Diminished advantages from foreign trade; for, whereas that trade is the most advantageous in which the exports purchase cheap imports, the future returns to India from such trade would be imports dearer than hitherto. On the other hand, if (as is inevitable, so long as India offers a fixed mint price for silver, to all comers) depreciated silver be imported into India as merchandise, drawing forth an increased amount of exports, which may overstock foreign markets, the gold price of the exports abroad will fall, while local prices in India will have increased.

(6).—Depreciation of their property to all holders of the existing Public Debt.

(7).—Diminished means of meeting expenditure for all on fixed incomes, and for all incomes of trusts and endowments.

(8).—Increase of taxation, that is, diminution of profits, that is, decrease of annual savings of the people, that is, increase of the rate of interest.

(9).—A collapse of vast projects of irrigation and railways which are designed to accelerate the material progress of India, and to provide security against famine, but which, with an increase of cost of construction, from a rise in prices, and from an increase of the rate of interest, would have to be abandoned as no longer promising to be remunerative.

And if, as seems probable, the profits from land would decrease, there might be a large decrease of land revenue, and fresh heavy expenditure on settlements of land revenue, which, after running its course from 1861-62, had nearly come to a close in the Bengal Presidency.

APPENDIX E.

TRADE OF BRITISH INDIA AND OF THE UNITED KINGDOM.

PARAS.

		PARAS.
BRITISH INDIA—		
1.	Imports and exports of merchandise and rate of exchange for Home Government's bills on India in each year from 1850-51.	1 to 4
2.	The peculiarity in the trade of India is that under imports one class of goods, *viz.*, cotton goods, and under exports two articles, *viz.*, raw cotton and opium, provide half or more than half the total trade.	3
3.	In imports, the bulk of the excess in 1874-75 over 1856-57 is in cotton goods, and nearly the whole of this accrued up to 1868 and 1870, when silver was at or above 60½ pence an ounce;—the fall in that price operates like a heavy import duty.	4 to 7
4.	The increase of imports, other than cotton goods and certain special articles, also occurred principally during the period of high exchange down to 1868-69.	8 to 12
5.	Under exports the trade increased by 28 millions up to 1868-69 over 1856-57; but of this more than two-thirds was in raw cotton and opium. Since then there has been a decrease of 5 millions under raw cotton, and the trade may possibly collapse from the competition of American cotton. In opium, there has been an increase since 1868-69 of 1¼ million, but only a small gradual increase can be looked for in this article.	13 & 14
6.	Among the remaining exports, increase has occurred under certain articles, such as rice, coffee, tea, indigo, jute, seeds, and hides and skins, for which there is a special demand. The trade in all other articles of export remained stationary from 1856-57 to 1868-69—or the period of high exchange. Since then, from the combined advantages of a low exchange, and low freights, the exports have increased by 1 to 1½ million.	15 to 20
7.	On the whole, it appears that, in articles which are not affected by special causes, the imports increased during the period of high exchange from 1856 to 1868, and the exports during the subsequent period of a low exchange.	21
UNITED KINGDOM—		
8.	In connexion with the exchange between the sovereign and the rupee, the trade of the United Kingdom may be regarded in two divisions—of the trade with countries which have a gold currency, and of that with countries which have a silver currency.	22 to 27
9.	The amount of trade in these divisions, from 1858 to 1874 ...	28
10.	The proportions of the trade with gold and silver coin countries have altered since 1858; whereas in that year they were about equal, the trade with the silver-using countries preponderating slightly, in 1873 and 1874 the imports from those countries were less than one-third, and the exports slightly more than one-fourth the total imports and exports.	29 and 30
11.	The bulk of the increase of trade with the silver coin countries occurred in the period from 1858 to 1869, during which silver was appreciating, or had appreciated, in value. Since that year, and also for the whole period, the increase of trade has been larger and more rapid with the gold coin countries.	31 and 32
12.	The trade with Germany, Holland, and Scandinavia has largely increased, and those countries having felt the inconvenience of a silver currency, for such a trade, are demonetising silver.	32
13.	The net imports of gold from the producing countries have been so steady as to raise a presumption that there has not been any falling off in the production of gold.	33 and 34
14.	Among the silver coin countries, one-half the trade is with Asia, outside which silver is being virtually demonetised.	35

		PARAS.
15.	Cotton goods form more than half the imports into India, and about one-third of the British merchandise exported from the United Kingdom. The exports of cotton goods to India and China are also one-half the total exports of those goods.	36
16.	On a review of the trade in those goods, and of the cost of production and proceeds of sale, it would seem that the heavy loss by exchange which is now sustained from the fall in the price of silver may make all the difference between a paying and a losing business, having regard to the effect of that loss as a protective duty in favor of local manufactures in silver coin countries.	37 to 39

APPENDIX E.

Trade of British India and of the United Kingdom.

British India.

The extent to which the trade of British India can be used for effecting the remittances for the Home expenditure of the Government of India depends upon—1*st*, the net indebtedness of England to India for herself and the several countries for which she settles with India; 2*nd*, on the balance of the foreign trade of India, which, after certain abatements, merges in the first head; 3*rd*, on the amount of that trade; for, inasmuch as the remittances necessitated, on the one side by exports from this country, and in India by her imports, do not always happen together in uniform proportions, the gross amount of trade is an element in the account, though not to anything like the same extent as the balance of the trade.

2. It is useful also, in considering the exchange between England and India, to have a definite idea, instead of a vague conception, or a mere general impression, of the power of expansion of the trade of India. A somewhat detailed review of that trade, but only from the exchange point of view, is accordingly necessary.

3. The peculiarity in the trade of India is that under imports one class of goods, *viz.*, cotton goods, and under exports two articles, *viz.*, raw cotton and opium, provide half or more than half the total trade.

4. From 1850-51 the whole foreign trade of India has been as follows, *viz.*:—

Year.	Merchandise:—Imports.							Merchandise:—Exports.					Price of standard silver in London per oz.	Rate on Home Government's bills on India.	Remarks.
	Cotton goods and yarn.	Silk and woolen goods and silk raw.	Machinery, metals and railway materials.	Total of 2 preceding.	Other merchandise.	Total, except cotton goods.	Grand Total.	Cotton raw.	Opium.	Total of 2 preceding.	Other merchandise.	Grand Total.			
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	Pence.	Pence.	
1850-51 ...	4·682	·571	1·819	2·390		6·877	11·559	3·475	5·459	8·934	9·230	18·164	60 1/16	24 1/4	
1851-52 ...	6·162	·535	1·158	1·693	4·487	6·078	12·240	3·620	6·515	10·135	9·744	19·879	61	24 1/8	Discovery of gold in Australia.
1852-53 ...	4·798	·493	·740	1·223	4·385	5·273	10·071	3·629	7·034	10·663	9·802	20·465	60 1/2	23 5/8	
1853-54 ...	5·739	·552	·816	1·368	4·050	5·384	11·123	2·802	6·437	9·239	10 056	19·295	61 1/2	24 1/8	
1854-55 ...	6·677	·629	1·065	1·694	4·016	6·066	12·743	2·429	6·231	8·660	10·267	18·927	61 1/2	23	Russian War began.
1855-56 ...	6·362	·547	2·283	2·830	4·372	7·582	13·944	3·315	6·201	9·516	13 523	23·039	61 5/16	24 1/8	
1856-57 ...	6·133	·369	2·755	3·124	4·752	8·062	14·195	4·438	7·057	11·495	13·843	25·338	61 5/16	24 1/4	Russian War ended.
1857-58 ...	5·721	·748	1·939	2·687	4·938	9·557	15·278	4·302	9·107	13·409	14·047	27·456	61 1/2	24 1/2	Panic, Commercial.
1858-59 ...	9 803	·947	4·275	5·222	6·870	11·926	21·729	4·094	10·828	14·922	14·941	29·863	61 5/16	26	
1859-60 ...	11·699	·890	4·819	5·709	6·704	12·566	24 265	5·638	9·054	14·692	13·268	27·960	62 1/16	...	
1860-61 ...	11·058	·887	5·277	6·164	6·857	12·436	23·494	7·342	10·185	17·527	15·444	32·971	61 1/16	...	
1861-62 ...	10·245	·858	4·615	5·473	6·272	12·075	22·320	10·203	10·554	20·757	16·560	36 317	60 3/16	...	American Civil War began.
1862-63 ...	9·631	1·031	4·676	5·707	6·602	13·001	22 632	18·779	12·494	31 273	16·587	47·860	61 7/16	23 7/8	Great distress in cotton manufacturing districts—Panic.
1863-64 ...	11·946	1·454	5·221	6·675	7·294	15·200	27·146	35·865	10·756	46·621	19·004	65·625	61 1/2	23 3/8	
1864-65 ...	13·227	1·641	4·996	6·437	8·525	14·924	28·151	37·574	9·912	47·486	20·541	68·027	61 1/2	23 7/16	
1865-66 ...	13·810	1·452	5·065	6·517	8·487	15·789	29·599	35·587	11·123	46,710	18·781	65 491	61 1/16	23 1/4	Close of American War.
1866-67 (11 *mos.*) ...	15·097	1·415	5·281	6·696	9·272	13 942	29·039	16·458	10·432	26·890	14·970	41·860	61 1/8	23	Commercial and Joint Stock Companies' panic.
					7·246										
1867-68 ...	17·698	1·589	7·482	9·071	8·937	18·008	35·706	20·093	12·331	32·424	18·450	50·874	60 9/16	23 1/8	Abyssinian Expedition.
1868-69 ...	18·852	1·977	6·226	8·203	8·935	17·138	35·990	20·150	10·696	30 846	22·217	53·063	60 1/2	23 1/4	
1869-70 ...	16 271	1·963	5·344	7·307	9·348	16·657	32·928	19·079	11·693	30·772	21·699	52·479	60 7/16	23 1/4	Distress in Lancashire.
1870-71 ...	19·045	1·903	4·627	6·530	7·839	14·369	33·414	19·461	10·784	30·245	25·087	55·332	60 9/16	22 3/4	Franco-Prussian War—Panic.
1871-72 ...	17·483	1·646	3·314	4·960	8·641	13·601	31·084	21·272	13·365	34·637	28·549	63·186	60 1/8	23 1/8	Peace between France and Germany.
1872-73 ...	17·230	1·940	2·761	4·701	9·330	14·031	31·261	14·023	11·426	25·449	29·778	55·227	60 5/16	22 3/4	
1873-74 ...	17·781	2·064	3·630	5·694	9·119	14·813	32·594	13·216	11·342	24·558	30·403	54·961	59 1/4	22 1/4	German Government announces demonetisation of silver.
1874-75 ...	19·421	2·141	4·556	6·697	9·849	16 546	35·967	15·257	11·957	27·214	29·103	56·317	58 5/16	22 1/4	

5. Under Imports there was an increase in 1856-57 over 1850-51 of 2·636 millions, the larger half in cotton goods and the rest in other merchandise. The subsequent increases have been as follows:—

	Cotton goods.	Other merchandise.	Total.
	£ Millions.	£ Millions.	£ Millions.
1862-63 over 1856-57	+ 3·498	+4·939	8·437
1868-69 over 1862-63	+ 9·221	+4·137	13·358
	+12·719	+9·076	+21·795
1873-74 over 1868-69	— 1·071	—2·325	— 3·396
Increase in 1873-74 over 1856-57	+11·648	+6·751	+18·399
Additional in 1874-75	+ 1·640	+1·733	+ 3·373
Increase in 1873-74 over 1862-63	+ 8·150	+1·812	+ 9 962
„ 1874-75 over 1873-74	+ 1·640	+1·733	+ 3·373

The bulk of the increase is in cotton goods, the imports of which rose to 11·699 millions in 1859-60. With the distress in Lancashire in 1862-63 the value of the cotton imports fell in that year to the lowest point, *viz.*, 9·631 millions, against 9·803 millions in 1858-59. The increase of 8 millions in 1873-74 over 1862-63 consists therefore, partly, of the recovery from an abnormal depression of trade. After 1862-63 the trade gradually recovered; but during the American civil war, that is, down to 1865-66, the high price of cotton checked the improvement, so that by the end of 1865-66 the imports had risen only 4 millions above 1862-63. From 1867-68, however, when increased supplies of American cotton were resumed, the price of cotton manufactures fell with the price of the raw cotton; and the imports of cotton goods increased to 18·852 millions in 1868-69 and to 19·045 in 1870-71, with a decline to 16·271 in the intervening year 1869-70. The annual average of the three years was 18·056 millions—an amount greater than in the next three years, down to 1873-74. In 1874-75 the amount rose to 19·421 millions—the largest ever attained; but the trade was not a profitable one, as stated in the following review of the Liverpool cotton trade in 1874: "1874 has been a *dull and uneventful year.* With the exception of an occasional spasm of activity, provoked by merely transient and delusive influences, the course of business has been monotonously slow, and the tendency of prices downwards. Throughout 1874 the actual supply of *the raw material has constantly exceeded the demand.* * * The result has been an almost continuous *readiness on the part of holders to sell,* in the face of a nearly chronic indifference on the part of consumers to buy. It is not surprising therefore that 1874 has been an *unprofitable one to importers of the raw material,* and a scarcely less unsatisfactory one to shippers of the manufactured article. Under ordinary circumstances, a year of *falling prices* is of advantage to spinners and manufacturers, but business in Manchester has been so slow, that yarns and goods have steadily followed the decline in raw cotton, and no advantage of moment has accrued to the producer, except in isolated instances."—*Economist, 13th March* 1875. "As a matter of fact, a number of the late stoppages have been owing probably to the unprofitable character of Manchester trade for some years past, especially to exporters, and it is evident that the old system of shipping to a market must give way to a modified style of indent business similar to that adopted with America."—*Bombay Gazette, 21st June* 1875. The italics in the preceding quotations are those in the *Economist.*

6. Any considerable improvement in the importation of cotton goods must depend—1*st*, on the ability of India to increase her exports wherewith to buy the additional imports; 2*ndly*, on the ability of the exporters in England

to increase their exports and extend their markets, despite the new tax upon their trade which is imposed by the low exchange: that tax must fall on their profits, unless* they can add it to the selling price of their goods. Such addition to the price would check consumption, and so restrain any further considerable growth of the importation of cotton goods.

7. As a low commercial exchange favors exports, it may be well to note here that an exchange which in India is a low exchange and favorable to exporters here, is a high or adverse exchange for exporters in England, who (at such exchange) get much less than a pound for every ten rupees of the bills against their shipments which are payable in India in rupees. Exporters in England, importers in India, and the Secretary of State, are all alike adversely affected by what is termed a low exchange.

8. The fall of above 7 per cent. in the price of silver in London, below the price in 1868, has the same effect on imports of cotton goods as an additional import duty. The value of imported cotton goods since 1868 had never, until 1874, been so great as in 1868. Low prices and low freights seem to have counteracted in 1874 the effect of the adverse exchange, and the imports in that year were larger than in any previous year, from causes (*para.* 5) which, perhaps, discourage expectation that the increase is permanent or can be maintained for any considerable time.

9. Respecting imported merchandise other than cotton goods, it is seen from paragraph 4 that all along from 1850-51 to 1867-68 they formed about half, or more than one-half the total imports; but that from 1868-69 (except in 1869-70) they have been less, and generally much less, than half the total imports. This, of course, means, primarily, that the relative increase has been greater in imports of cotton goods than of other goods. But still the absolute increase in the latter has not been much. By 1862-63 there had indeed been an increase in the intervening six years of 4·939 millions over 1856-57, but in the next eleven years the increase, by 1873-74 over 1862-63, was only 1·812 million; and even this is merely the net result of a gross increase of 4·137 millions in the six years after 1862-63, or by 1868-69, less a decrease of 2·325 millions in the five years after 1868-69, or by 1873-74 below 1868-69.

10. On the plan of the table in paragraph 5, the details of the imports of other than cotton goods may be given thus:—

	Silk and piece-goods, and silk raw.	Other merchandise, except machinery, metals, &c.	Total.	Machinery, metals, and railway materials.	Total.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
Increase in 1862-63 over 1856-57 ...	·662	2·356	3·018	1·921	4·939
„ 1868-69 „ 1862-63 ...	·946	1·641	2·587	1·550	4·137
	1·608	3·997	5·605	3·471	9·076
„ 1873-74 „ 1868-69 ...	+·087	+·184	+ ·271	—2·596	2·325
„ 1873-74 „ 1856-57 ...	1·695	4·161	5·876	·875	6·751
„ 1873-74 „ 1862-63 ...	1·033	1·825	+2·858	—1·046	+1·812
„ 1874-75 „ 1873-74 ...	·077	·730	+ ·807	+ ·926	+1·733

Of the total increase up to 1873-74 of 6·751 millions, the bulk (4·939 millions) occurred by 1862-63 over 1856-57, or in six years. For the next eleven years, or by the end of 1873-74, the additional increase was only 1·812 million, while in the last five of these eleven years there was a decrease of 2·325 millions in 1873-74, compared with 1868-69.

11. This last decrease has occurred under metals and railway materials, owing to the completion wellnigh of the guaranteed railways. Excluding metals and railway materials, the total increase up to 1873-74 was 5·876 millions, of which rather more than half (3·018 millions) accrued by 1862-63, and

* In the outset the tax does fall on the importers in India; for the exporters in England draw against their shipments on the importers in India, and sell the bills to Banks at the low exchange of the day, leaving the importers to bear the loss by exchange as they may. These latter, perforce, reduce their orders, or, if they first add the exchange loss to their selling price, they contract their business or sales, and so still, in the end, reduce their orders. With the lessened demand from India, the home prices of the exports to India must fall; and so, eventually, the tax imposed by a low exchange falls on the exporters from the United Kingdom.

nearly all the remainder by 1868-69, since which year, or in the five years up to 1873-74 inclusive, the increase was only £271,000 or, adding the further increase in 1874-75, 1·078 million. The fall in exchange since 1868-69-70, which has operated as a tax on the import trade, no doubt explains the decrease of imports since 1868-69, though they have slowly progressed since 1871-72.

12. Putting the preceding results in a slightly different form, we have an increase in—

	Cotton goods.	Other merchandise, except metals and railway materials.	Total.	Metals and railway materials.	Grand Total.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
1862-63 over 1856-57 ...	3·498	3·018	6·516	1·921	8·437
1868-69 over 1862 63 ...	9·221	2·587	11·808	1·550	13·358
	12·719	5·605	18·324	3·471	21·795
1873-74 over 1868-69 ...	—1·071	+·271	—·800	—2·596	—3·396
Increase in 1873-74 over 1856-57	11·648	5·876	17·524	+ 875	18·399
Additional increase in 1874-75 ...	1·640	+·807	2·447	+·926	3·373
Increase in 1873-74 over 1862-63	8·150	2·358	11·008	—1·047	9·962

Nearly all the increase up to 1873-74 occurred down to 1868-69, or while there was a high* exchange favorable for exporters in England and for importers in India. Of the further increase in 1874-75, that in cotton goods was from exceptional causes.

13. Turning, now, to the exports which are set forth in the table in paragraph 4, it appears that there was a general increase of exports by 1856-57 over 1850-51. Since 1856-57 the figures have been—

	Cotton, raw.	Opium.	Total.	Other merchandise.	Grand Total.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
1862-63 over 1856-57	14·341	5·437	19·778	2·744	22·522
1868-69 over 1862-63	1·371	— 1·798	—427	5·630	5·203
	15·712	+3·639	19·351	8·374	27 725
1873-74 over 1868-69	—6·934	+·646	—6·288	+8·186	1·898
Increase in 1873-74 over 1856-57 ...	8·778	+4·285	+13·063	16·560	29·623
Increase in 1874-75 over 1873-74 ...	2·041	+·615	+2·656	—1·300	+1·356

From 1857-58 to 1859-60 raw cotton and opium constituted half or a little more than half, and from 1861-62 to 1871-72 very much more than half the total exports. Of the total increase in 1873-74 over 1856-57 nearly half has been in these two articles, and the bulk of that increase from them accrued up to 1868-69—since which year the exports of cotton had decreased in 1873-74, compared with 1868-69, by 6·934 millions, while the exports of opium increased in the same interval by only £646,000. Under opium only a small gradual increase can be looked for. In raw cotton the exports have permanently declined from 20 millions in 1868-69; in 1872-73-74 they were 14 millions and 13½ millions respectively. They slightly rallied in 1874-75, in which year they amounted to 15·257 millions sterling, against 20·150 millions in 1868-69, and they may fluctuate at about 14 or 15 millions, *i.e.*, at somewhat above or below these sums, according to the degree in which the adverse influence of a low price in Liverpool may be counteracted, more or less, by a low exchange in India,

* High, in the sense of a high variable or sterling price for the fixed rupee. This high rate was virtually a low or cheap rate for exportors in England, who got more of sterling for their rupee bills on India than if the exchange had been a smaller number of pence per rupee.

low freights or a low price to cultivators. The fall in price at Liverpool has been as follows:—

RAW COTTON.

AVERAGE PRICE IN THE UNITED KINGDOM.

Per lb.

	Upland. Pence.	Surat. Pence.	Manufactures exported. Average per yard. Pence.
1845-50	5½	5⅛ 1850	3·63
1851	5¾	4 & 5	3·43
1852 to 54..	5⅝	..	3·48
1855	5¼	..	3·24
1858	6¼	3½ & 5	3·31
1860	5⅞	..	3·49
1861	7¾	..	3·38
1862	16	..	4·07
1863	23⅛	..	5·28
1864	26¾	..	6·07
1865	18½	{ 20 Dhollerah }	5·34
1866	14⅛	7¼	5·39
1867	11	12½	4.50
1868	11¼	5½	4·05
1869	11⅝	8½	4·18
1870	9 1/16	9½	3·90
1871	8 9/16	6½	3·73
1872	10⅛	7¾	3·97
1873	9	7¼ ⅛	3·86
1874	8 { January / December	6⅝ / 6¼	3·63
1875		January 6⅝	
	29th April .. 8 to 8¼	June 5⅝	

(The growth of local manufactures of cotton may also check its export, but any restriction from this cause will imply a corresponding diminution of imported cotton goods, and so it may not affect the balance of trade.)

14. Thus far it would appear that in the two articles which, until 1871-72, constituted more than half, and since that year have been somewhat less than half the total exports, there is not room for anticipating any very considerable increase in their export;—rather, the export trade in raw cotton may be extinguished by American cotton (see Appendix B).

15. The other principal articles of export may be detailed as follows:—

YEAR.	Rice and Wheat.	Coffee.	Tea.	Indigo.	Jute, raw.	Seeds.	Hides and Skins.	Other articles.	TOTAL.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
1850-51 ...	·752	·101	Figures not available here—included in "Other articles."	1·981	·197	·340	·324	5·535	9·230
1851-52 ...	·869	·084		2·025	·181	·501	·303	5·781	9·744
1852-53 ...	·889	·097		1·810	·113	·449	·338	6·106	9·802
1853-54 ...	1·414	·110		2·068	·215	·472	·402	5·375	10·056
1854-55 ...	1·743	·083		1·702	·229	·813	·402	5·295	10·267
1855-56 ...	2·896	·120		2·424	·329	1·273	·432	6·049	13·523
1856-57 ...	2·587	·133		1·938	·275	1·119	·573	7·218	13·843
1857-58 ...	3·790	·100		1·734	·303	1·380	·640	6·100	14·047
1858-59 ...	2·802	·135		2·118	·525	2·059	·545	6·757	14·941
1859-60 ...	2·588	·189		2 021	·290	1·549	·445	6·186	13·268
1860-61 ...	3·098	·337		1·887	·409	1·786	·662	7·265	15·444
1861-62 ...	3·783	·468	·192	1·648	·538	1·206	·794	6·931	15·560
1862-63 ...	3·728	·513	·224	2·127	·750	1·834	·904	6·507	16·587
1863-64 ...	4·325	·658	·271	1·756	1·507	2·033	·898	7·556	19·004
1864-65 ...	5·956	·802	·301	1·860	1·308	1·912	·725	7·677	20·541
1865-66 ...	5·248	·785	·310	1·862	·772	1·750	·610	7·444	18·781
1866-67 (11 mos.)	3·654	·414	·378	1·816	·674	1·788	659	5·587	14·970
1867-68 ...	3·961	·761	·730	1.823	1·310	2·161	·988	6·716	18·450
1868-69 ...	4·575	1·121	·984	2·894	1·892	1·905	1·253	7·503	22·217
1869-70 ...	3·221	·870	1·081	3·178	1·985	2·309	1·691	7·364	21·699
1870-71 ...	4·469	·810	1·140	3·193	2·578	3·522	2·021	7·354	25·087
1871-72 ...	4·866	1·380	1·482	3·705	4·117	2·729	2·526	7·744	28·549
1872-73 ...	6·074	1·146	1·591	3·427	4·143	1·508	2·922	8·967	29·778
1873-74 ...	6·548	1·496	1·755	3·555	3 436	2·361	2·618	8·634	30·403
1874-75 ...	5·252	1·305	1·937	2·576	3·247	3·236	2·678	8·872	29·103

16. From the foregoing statement it appears that the exports of the specified articles, and of other articles, have been as follows:—

Value of Exports.

	Year.	Specified articles. £ Millions.	Other articles. £ Millions.	Total. £ Millions.
	1850-51 ...	3·695	5·535	9·230
	1855-56 ...	7·474	6·049	13·523
High exchange.	1856-57 ...	6·625	7·218	13·843
	1861-62 ...	8·629	7·265	15·444
	1862-63 ...	10·080	6·507	16·587
	1863-64 ...	11·448	7·556	19·004
	1867-68 ...	11·734	6·716 *A*	18·450
	1868-69 ...	14·714	7·503 *A*	22·217
	1870-71 ...	17·733	7·354	25·087
Low exchange.	1873-74 ...	21·769	8·634 *B*	30·403
	1874-75 ...	20·231	8·872 *B*	29·103

A—High freights: ships diverted to Abyssinian Expedition.
B.—Low freights.

With an exception in 1873-74-75 to be presently noticed, the exports of the specified articles appear to have steadily increased, but yet with a progress which was checked or restrained during the period of high rates of exchange. In the later years of a low exchange, combined with low freights, the trade expanded.

17. Similarly, with regard to the other articles not specified, the exports appear to have fluctuated from 1856-57 to 1868-69, or the period of high rates of exchange, between 7·218 millions, the amount reached in 1856-57, and £7·677, the amount reached in 1864-65. During those thirteen years of high exchange the exports of these minor articles were doubtless subject to alternations from varying rates of freight, but they appear to have been otherwise virtually stationary: afterwards, with low exchange and low freights, they increased by 1 to 1½ million sterling.

18. Among the articles specified in the table in paragraph 15 are tea and jute, raw. The former being chiefly used for mixing with China tea, its export will increase with the progress in the consumption of China tea, but may be checked whenever the latter is checked: for the present, however, a further increase may be expected.

19. The trade in jute increased during the cotton famine, and the staple made good its extended footing even after the renewal of full supplies of cotton from America; but the trade was overdone in 1871-72-73 (paragraph 15), and there came a reaction of low prices with diminished exports in 1873-74-75. As with cotton, if local manufactures of jute be extended in India, there may be a further diminution of export.

20. On the whole, then, it appears that, with the foregoing reservation as to jute, the exports of the articles specified in paragraph 15 increase with the growth of a special demand for them, independently of the further stimulus which (in common with other exports) these exports receive from a low exchange and from the prevalence of low freights.

21. Bringing together the account of imports and exports as given in paragraph 4, and in the explanation in succeeding paragraphs, it appears—

A—As to Imports—

I.—That all the increase which has occurred since 1856-57 accrued during a period of high exchange, or up to 1868-69. In that period there was (paragraph 4) a steady, unbroken progress in the importation of cotton goods, which was restrained in rate of progress by high prices during the cotton famine, but which increased at one bound by 5 millions or 33 per cent. on the renewal of supplies of cotton from America—only, however, to decline with the fall in exchange and in the price of silver, down to 1873-74, below the point reached in 1868-69. In 1874-75 there was a large increase of imports from exceptional causes. The imports of other merchandise have declined much below the amount in 1868-69.

B—AS TO EXPORTS—

II.—That, owing to a high exchange, there was no sensible expansion of the trade in the mass of exports (other than certain staples to be presently noticed) from 1856-57 to 1868-69, though this mass comprised in value one-half the total exports in 1856-57. Since the low exchange in 1872-73-74, however, the value of this mass of exports has increased by 1 to 1½ million sterling.

III.—That, despite the high exchange from 1856-57 to 1868-69, the trade in various staples, for which there is a special demand, increased in that period. From this cause the value of the total exports increased from 1856-57 faster than that of the imports, *viz.*, by 22½ millions in 1862-63 over 1856-57, against an increase in imports of only 8½ millions in that period. With, however, the cheapening of cotton on the close of the American war, 1867-68 showed an increase over 1862-63 of only 3 millions, or in 1868-69 of only 5 millions in exports, against an increase of 13 millions in imports in the same period. Since 1868-69 the exports have had the additional advantage of a low exchange and low freights, and they have increased, on the whole, up to 1874-75, by 5½ millions since 1867-68, or by 3¼ millions since 1868-69, notwithstanding a decrease in that interval of 5 millions in the exports of raw cotton. The imports in the same period of low exchange, or since 1868-69, have declined by 3½ millions.

C—AS TO EXPORTS AND IMPORTS—

IV.—That in the period of high exchange from 1856-57 to 1868-69 the imports increased by nearly 22 millions, and the exports (from a special demand for certain staples) by nearly 28 millions. In the subsequent period of low exchange, down to 1873-74, the imports fell off by 3½ millions, leaving a net increase over 1856-57 of 18 millions, while the exports increased by 2 millions, giving a total increase over 1856-57 of nearly 30 millions.

Trade of United Kingdom.

22. Any review of the subject of exchange between the gold sovereign and the Indian rupee, as affecting the foreign trade of India, and as it is affected by the fall in the price of silver, must be incomplete without a survey of facts relating to the trade of the United Kingdom.

23. Regarded in the aspect of foreign exchanges, those facts may be arranged in two divisions of the trade of the United Kingdom with countries which have a gold currency, and of that with countries which have a silver currency: and in both divisions the trade with the gold and silver-producing countries may be kept distinct from the trade with other countries.

24. In this distribution of the trade, Germany, Holland, and the Scandinavian countries, which have hitherto had a silver currency, will be classed with the silver coin countries,—the change to a gold currency not having been yet completed in Germany, being barely completed in Scandinavia, and being deferred in Holland for a period of transition during which there will be a double standard.

25. There are other countries, with a double standard, in which the relative value of gold to silver is as follows, *viz.*:—

I.	United States (for the whole dollar) ...	... 1 to 16
II.	France, Belgium, Italy, Greece, Peru ...	... 1 to 15½
III.	Spain	... 1 to 15·477
IV.	SOUTH AMERICA,—Ecuador and New Grenada	... 1 to 15¼

The under-valuation of silver in the first two groups has practically demonetised it; and the trade of the countries in those groups, together with the trade of Spain, will accordingly be included in that of the gold coin countries. The countries in the fourth group will be included in the silver coin countries.

26. The trade of the United Kingdom has been as follows:—

Africa has a silver currency, except in Egypt; but, as the trade of the United Kingdom with Egypt includes a large and preponderating trade with the

East, Egypt may be included, with the rest of Africa, among the silver coin countries.

27. The gold and silver coin countries may accordingly be arranged as follows, *viz.*:—

GOLD CURRENCY.

EUROPE—

Great Britain.
France.
Belgium (demonetised gold in 1850, but her trade is mixed up with that of France, and she adopted the double standard of France in 1865).
Portugal, Spain, Gibraltar, Italy, Greece, Turkey.

AMERICA—

North America—

North American Colonies.
United States.

South America—

Chili.
Peru.
Brazil.

AUSTRALASIA—

Australia.
New Zealand.

SILVER CURRENCY.

EUROPE—

Germany, Holland, and Hamburg.
Scandinavia.
Russia.
Austria.

AFRICA—

AMERICA—

West Indies—English, Spanish, and Danish.

North Amercia—

Mexico.

South and Central America—

Central America. }
New Grenada. }
Argentine Confederation.
Ecuador, and other States.

ASIA—

India.
China.
Japan.
Philippine Isles.

28. The trade of the United Kingdom with the countries which have silver and gold currencies, respectively, has been as follows:—

	1858.	1859.	1860.	1861.	1862.	1863.	1864.
A.—MERCHANDISE.							
IMPORTS—	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
I.—Silver coin countries—							
Silver producing countries—							
South and Central America	2·892	3·630	3·368	3·314	4·152	6·108	7·794
Russia	11·940	13·549	16·202	12·823	15·101	12·419	14·713
TOTAL ...	14·832	17·179	19·570	16·137	19·253	18·527	22·447
Germany, Holland, and Scandinavia ...	19·712	23·255	30·632	26·754	28·181	29·171	33·637
Other silver coin countries...	48·528	52·880	56·251	63·105	82·212	108·057	119·541
TOTAL ...	83·072	93·314	106·453	105·996	129·646	155·755	175·625
II.—Gold coin countries—							
Gold producing countries	48·546	46·573	58·632	64·509	44·497	37·078	40·801
Other gold coin countries	32·966	39·301	45·447	46 983	51·571	56·086	58·524
TOTAL ...	81·512	85·874	104·079	111·492	96·068	93·164	99·325
GRAND TOTAL ...	164·584	179·188	210·532	217·488	225·714	248·919	274·950
EXPORTS—							
I.—Silver coin countries—							
Silver producing countries—							
South and Central America	3·310	3·712	4·758	4·263	3·383	5·830	7·873
Russia	5·262	6·356	5·447	5·766	3·741	4·287	6·086
TOTAL ...	8·572	10·068	10·205	10·029	7·124	10·117	13·959
Germany, Holland, and Scandinavia ...	26·673	26·575	30·937	33·044	33·234	38·796	42·584
Other silver coin countries...	36·360	42·196	42·128	39·607	36·723	47·607	51·398
TOTAL ...	71·605	78·839	83·270	82·680	77·081	96·520	107·941
II.—Gold coin countries—							
Gold producing countries	33·907	43·160	41·244	29·810	37·696	39·953	42·555
Other gold coin countries	34·271	33·485	40·008	47·113	51·389	60·425	62·122
TOTAL ...	68·178	76·645	81·252	76·963	89·085	100·378	104·677
GRAND TOTAL ...	139·783	155·484	164·522	159·643	166·166	196·898	212·618
B.—TREASURE.							
GOLD—							
Net Imports—							
Producing countries ...	18·432	19·992	9·880	·588	15·617	13·647	14·405
Other countries ...	...	...	...	·307	...	...	...
TOTAL ...	18·432	19·992	9·880	·895	15·617	13·647	14·405
Net Exports—							
Non-producing countries	8·205	15·777	12·938	...	11·728	9·806	10·787
Net imports ...	10·227	4·215	...	·895	3·889	3·841	3·618
Net exports ...	...	...	3·058	...	...	...	...
SILVER—							
Net Imports—							
Producing countries ...	3·086	5·013	5·234	4·890	6·551	7·372	7·049
Net Exports—							
Non-producing countries	3·449	7·846	4·824	7·881	8·113	7·723	6·073
Net imports ...	...	...	·410	.	...	...	·976
Net exports ...	·363	2·833	...	2·991	1·562	·351	...

1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.
£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
8·003	5·352	4·430	5·064	4·918	4·066	6·260	6·281	7·231	5·720
17·384	19·625	22·287	20·052	16·674	20·561	23·721	24·320	21·189	20·933
25·387	24·977	26·717	25·116	21·592	25·527	29·981	30·601	28·420	26·653
36·963	38·763	38·796	38·249	39·685	41·364	43·353	45·049	47·456	49·695
98·449	88·322	74·964	88·426	88·550	76·666	86·696	96·390	90·452	84·334
160·799	152·062	140·477	151·791	149·827	143·557	160·030	172·040	166·328	160·682
46·495	71·460	67·951	70·856	69·659	78·716	89·917	89·544	106·118	108·651
63·777	71·749	66·758	71·959	75·975	80·985	81·065	93·114	98·841	100·750
110·272	143·209	134·709	142·815	145·634	159·701	170·982	182·658	204·959	209·401
271·071	295·271	275·186	294·606	295·461	303·258	331·012	354·698	371·287	370·083
6·795	9·254	8·328	6·916	7·002	7·109	8·293	10·999	11·189	9·181
6·181	6·916	7·250	7·207	9·654	10·070	9·932	9·468	11·548	11·865
12·976	16·170	15·578	14·123	16·656	17·179	18·225	20·467	22·737	21·046
47·158	44·118	48·838	52·950	53·788	50·917	66·071	74·715	71·315	66·349
47·925	55·447	57·949	54·860	52·394	60·777	57·433	64·775	61·959	62·006
108·059	115·735	122·365	121·933	122·838	128·873	141·729	159·957	156·011	149·401
47·940	57·096	44·368	45·562	51·764	52·206	60·869	75·884	69 852	65·675
61·830	66·076	59·065	60·286	62·419	63·001	80·976	78·757	85·163	82·574
109·770	123·172	103·433	105·848	114·183	115·207	141·845	154·641	155·015	148·249
217·829	238·907	225·798	227·781	237·021	244·080	283·574	314·598	311·026	297·650
10·673	15·343	13·872	13·931	10·466	14·659	12·316	12·681	12·025	13·584
...	...	...	...	...	...	...	...	...	...
10·673	15·343	13·872	13·931	10·466	14·659	12·316	12·681	12·025	13 584
4·681	4 578	5·965	9·504	5·170	5·863	11·489	13·964	10·487	6·060
5·092	10·765	7·907	4·427	5·296	8·793	·827	...	1·538	7·524
...	...	...	...	...	...	...	1·283	...	...
...	6·206	6·474	5·261	3·580	7·563	9·072	7·367	8·386	7·469
...	4·326	4·888	5·056	4·754	5·823	5·612	6·813	5·227	5·094
...	1·880	1·586	·205	...	1·740	3·460	·554	3·159	2·375
...	...	...	...	1·174	...	...	...	...	...

29. Russia has gold mines, but a silver currency, and in the preceding table she has been included under Merchandise among the silver coin countries, but under Bullion and Specie among the countries which produce gold and silver. The trade of the United Kingdom with foreign countries forms a considerable part of the foreign trade of those countries; and the first remark suggested by the table is the increasing proportion of the trade of the United Kingdom with countries which have a gold currency. Thus—

	1858.	1861.	1865.	1869.	1871.	1872.	1873.	1874.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
IMPORTS.								
Silver coin countries—								
South and Central America ...	2·892	3·314	8·003	4·918	6·260	6·281	7·231	5·720
Indian trade	25·140	36·716	66·322	57·051	54·356	59·115	53·585	50·287
West Indies, Africa, and remainder of Eastern trade ...	22·718	25·671	31·449	29·222	31·102	36·363	35·998	33·248
Europe, except Germany, Holland, and Scandinavia ...	12·610	13·541	18·062	18·951	24·959	25·232	22·058	21·732
Total ...	63·360	79·242	123·836	110·142	116·677	126·991	118·872	110·982
Germany, Holland, and Scandinavia	19·712	26·754	36·963	39·085	43·353	45·049	47·456	49·695
Total ...	83·072	105·996	160·799	149·827	160·030	172·040	166·328	160·682
Gold coin countries ...	81·512	111·432	110·272	145·634	170·982	182·658	204·959	209·401
GRAND TOTAL .	164·584	217·488	271·071	295·461	331·012	354·698	371·287	370·083
EXPORTS.								
Silver coin countries—								
South and Central America ...	3·310	4·263	6·795	7·002	8·293	10·999	11·189	9·181
Indian trade	22·591	22·703	28·774	30·304	30·570	31·758	33·305	35·072
West Indies, Africa, and remainder of Eastern trade ...	12·173	15·339	18·289	20·497	24·778	28·071	26·841	25·498
Total ...	38·074	42·305	53·858	57·803	63·641	70·828	71·335	69·751
Europe, except Germany, &c....	6·858	7·331	7·043	11·247	12·017	14·414	13·361	13·301
Total ...	44·932	49·636	60·901	69·050	75·658	85·242	84·696	83·052
Germany, &c.	26·673	33·044	47·158	53·788	66·071	74·715	71·315	66·349
Total ...	71·605	82·680	108·059	122·838	141·729	159·957	156·011	149·401
Gold coin countries ...	68·178	76·963	109·770	114·183	141·845	154·641	155·015	148·249
GRAND TOTAL ...	139·783	159·645	217·829	237·021	283·574	314·598	311·026	297·650
Gold coin countries, with Germany, Holland, and Scandinavia.								
Imports	101·224	138·246	147·235	185·319	214·335	227·707	252·415	259·096
Exports	94·851	110·007	156·928	167·071	207·916	229·356	226·330	214·598

30. The proportions of the trade with the silver coin and the gold coin countries were about equal, or were slightly greater for the former, in 1858, both under imports and exports; in 1873 and 1874 the proportions under exports were still equal, but under imports the proportion of the trade with the gold coin countries was greater than that with the silver coin countries. If, however, Germany, Holland, and Scandinavia, which have determined to demonetise silver, be reckoned in 1858 among the silver coin and in 1873 among the gold coin countries, the proportions become—

	Imports.			*Exports.*		
	1858.	1873.	1874.	1858.	1873.	1874.
	Per cent.			Per cent.		
Silver coin countries ...	50·4	32·2	30	51·23	27·2	27·9
Gold ditto ...	49·6	67·8	70	48·27	72·8	72·1
	100·0	100·0	100	100·0	100·0	100·0

Whereas the imports from and exports to the silver coin countries preponderated in 1858, they were 29 or 30 per cent. of the total trade in 1873 and 1874.

31. It is also noticeable that the bulk of the increase in the silver coin countries occurred in the period from 1858 to 1869, during which silver was appreciating, or had appreciated, in value: thus—in Imports the increase was 66·755 millions up to 1869, and only 16·501 more up to 1873, or 10·855 up to 1874; whereas in the gold coin countries the corresponding increase was 64·122 millions up to 1869, 59·325 millions more up to 1873, and 63·767 up to 1874. Under Exports, the increase in the silver coin countries was 51·233 millions up to 1869, 33·173 millions more up to 1873, and only 10·855 millions up to 1874; while in the gold coin countries the corresponding increase was 46·005 millions up to 1869, 40·832 millions more up to 1873, and 34·066 millions up to 1874.

32. Another prominent fact in the table in paragraph 29 is the very great increase of the trade of Germany, Holland, and Scandinavia with the United Kingdom; the proportion of increase under imports and exports alike being greater, and under exports being very much greater, than in any of the silver coin countries, except those which produce silver. The exports from the United Kingdom constitute imports of the other countries concerned, and it is in respect of these imports, more particularly from a gold coin country into one with a silver currency, that inconvenience is felt in the latter country. Accordingly, it is not surprising that these countries are adopting a single gold standard; yet the trade of Germany and Scandinavia with the United Kingdom is less than the Indian trade with Great Britain, including in that trade Egypt and Mauritius.

33. The net imports of gold from the gold-producing countries have been pretty steady, in the aggregate, as follows:—

	Amount.	Annual average.		Amount.	Annual average.
	£ Millions.	£ Millions.		£ Millions.	£ Millions.
1858 ...	18·432		1868 ...	13·931	
1859 ...	19·992		1869 ...	10·466	
1860 ...	9·880		1870 ...	14·659	
1861 ...	·588		1871 ...	12·316	
1862 ...	16·658		1872 ...	12·681	
	65·540	13·110		64·053	12·811
1863 ...	15·450		1873 ...	12·151	
1864 ...	14·405		1874 ...	13·584	
1865 ...	10·673				
1866 ...	15·343			25·735	12·868
1867 ...	13·872				
	69·743	13·949	Grand Total ...	225·071	13·239

In recent years, since the expansion of French commerce after the close of the Franco-Prussian war, there have been direct exports of gold from the United States to France: and in 1873, the three millions sterling of indemnity for the *Alabama* claims diminished the exports from those States; the growing popularity of the United States bonds in the London market, within the past two or three years, also caused a transfer to London of part of the stock created for war debts between 1861 and 1865, and this transfer was equivalent to an export of gold from the United States. If these considerations be allowed for, the slight diminution in the total net imports, in the period since 1868, was not caused by any lessened production of gold. An increase of exports from the United States in 1862, 1863, and 1864 was owing to the suspension of cash payments, and perhaps, partly, to the short exports in 1860 and 1861. In the latter year there was a net export of gold *to the United States* of £7·260 millions.

34. The net imports of silver from the producing countries and the net exports thereof to other countries are suggestive:—

	Net imports from producing countries.	Net exports to other countries.		Net imports from producing countries.	Net exports to other countries.
	£ Millions.	£ Millions.		£ Millions.	£. Millions.
1858 ...	3·086	3·449	1866 ...	6·206	4·326
1859 ...	5·018	7·846	1867 ...	6·474	4·888
1860 ...	5·234	4·824	1868 ...	5·261	5·056
1861 ...	4·890	7·881	1869 ...	3·580	4·754
1862 ...	6·551	6·113	1870 ...	7·563	5·823
1863 ...	7·372	7·723	1871 ...	9·072	5·612
1864 ...	7·059	6·073	1872 ...	7·367	6·813
1865 ...	5·136	4·740	1873 ...	8·386	5·227
			1874 ...	7·469	5·094
	44·341	50·649		61·378	47·593
		44·341		47·593	
Net export		6·308	Net import ...	13·785	

In the earlier period, down to 1865, the import of silver was largely affected by bullion operations, as distinct from settlements of the balance of trade; in other words, a portion of the net imports of gold from gold-producing countries was employed in buying silver from all other countries for remittance to the East. In this way, the exports of silver from the United Kingdom, from 1858 to 1865, to countries which do not produce it, exceeded the imports from producing countries by 6⅓ millions, exclusive of the very large amounts of silver from the Continent which were shipped from Marseilles, as proceeds purchased by exports of gold from London.

From 1866, however, the set of the bullion trade changed. Since that year the net imports of silver into the United Kingdom, down to 1874, exceeded the net exports thereof to all other countries by £13·785 millions.

35. It has been seen in paragraph 30 that, whereas the export and import trade was about equally divided in 1859 between silver coin and gold-using countries, the former having a slight advantage, in 1873 and 1874 the imports from the silver coin countries were less than one-third, and the exports slightly more than one-fourth of the total imports and exports. The distribution of the trade with silver coin countries (excluding Germany, Holland, and Scandinavia) between the East and West, was as follows:—

	1858.	1861.	1865.	1869.	1871.	1872.	1873.	1874.
IMPORTS.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
Indian trade ...	25 140	36 716	66 322	57 051	54 356	59 115	53 585	50 287
Remainder of East ...	7 819	10 456	13 320	11 670	13 797	15 955	15 284	13 929
	32 959	47 172	79 642	68 721	68 153	75 070	69 869	64 216
Other countries ...	30 401	32 070	44 194	41 421	48 524	51 921	49 003	46 771
	63 360	79 242	123 836	110 142	116 677	126 991	118 872	110 987
EXPORTS.								
Indian trade ...	22 591	22 703	28 774	30 304	30 570	31 758	33 305	35 072
Remainder of East ...	3 515	5 777	7 911	11 701	12 053	12 527	10 950	10 595
	26 106	28 480	36 685	42 005	42 623	44 285	44 255	45 667
Other countries ...	18 826	21 156	24 216	27 045	33 035	40 957	40 441	37 385
	44 932	49 636	60 901	69 050	75 658	85 242	84 696	83 052

In the Indian trade is included that with countries with which the balance of trade is settled through the Indian trade, *viz.*, Mauritius, Ceylon, the Straits Settlements and Java; Egypt also is included, a great part of the trade entered for it being really for India. The largest part of the total trade is with the East or Asia, outside which silver is demonetised. The loss by exchange from the fall in the price of silver is felt in realising the proceeds of exports to the East, and these show less progress than the exports to other silver coin countries, and but little progress since 1869, especially if 1874, a year of unsound, losing trade in exports, be thrown out of account.

36. Cotton goods form more than half the imports into India, and, until an increase of the value of exports of iron, they formed more than one-third of the exports of British produce and manufactures from the United Kingdom. It will be useful accordingly to review the trade in the exports of cotton goods, particularly as the East absorbs half of the total exports of these goods: thus—

Exports of cotton piece-goods from the United Kingdom.

	India and Egypt.	China.	Total.	Turkey and Levant.	America.	European Continent.	Total.	Grand Total.
	Yards. Millions.	Yards. Millions.	Yards. Millions.	Yards. Millions.	Yards. Millions.	Yards. Millions.	Yards. Millions.	Yards. Millions.
1860 ...	910	324	1234	272	753	517	1542	2776
1868 ...	924	328	1252	509	550	657	1716	2968
1869 ...	916	324	1240	272	753	515	1540	2780
1870 ...	1289	500	1789	290	603	495	1478	3267
1871 ...	1291	551	1846	244	748	573	1565	3411
1872 ...	1255	464	1719	330	800	686	1816	3535
1873 ...	1340	401	1741	327	728	686	1741	3482
1874 ...	1397	463	1860	306	711	726	1743	3603

37. If there be a heavy loss by exchange, amounting to 10 per cent. or more, on one-half the exports of cotton goods, the unprofitable character of the trade cannot excite surprise,—this loss operating as a protective duty in favor of local manufactures, far more effectively than a customs duty of 5 per cent.

	1858 Millions.	1859 Millions.	1860 Millions.	1861 Millions.	1868 Millions.	1869 Millions.	1870 Millions.	1871 Millions.	1872 Millions.	1873 Millions.	1874 Millions.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1. Cotton consumed ...	908	978	1,079	1,005	996	939	1,072	1,206	1,175	1,246	1,226
2. Yarn produced (less waste) ...	813	875	966	900	877	817	1,942	1,073	1,040	...	...
MANUFACTURED.											
3. Yarn exported	200	192	197	178	175	170	186	193	212	215	220
4. Piece-goods and apparel exported	453	501	543	496	549	535	616	680	699	688	726
5. Estimated actual home consumption	158	172	173	174	160	125	140	185	145	175	173
6. TOTAL ...	811	865	913	848	884	830	942	1,058	1,056	1,078	1,119
VALUE OF MANUFACTURES.	£	£	£	£	£	£	£	£	£	£	£
7. Yarn exported	9·579	9·458	9·870	9·292	14·709	14·157	14·671	15·055	16·710	15·8	14·5
8. Piece-goods exported ...	37·025	43·059	46·248	41·514	57·343	57·660	61·424	63·382	69·900		
9. Home consumption ...	16·480	19·706	24·470	23·525	19·665	14·380	17·050	23·520	15·660		
10. TOTAL ...	63·084	72·223	80·588	74·331	91·717	86·197	93·145	101·957	102·270	104·6	100·5
EXPENDITURE.											
11. Value of raw cotton consumed ...	24·811	27·577	28·910	32·205	40·989	43·772	42·145	40·810	48·054	45·4	40·2
12. Paid in wages and other expenses	27·910	30·330	33·600	31·360	34·940	32·045					
13. Left for interest of capital and profits	10·363	14·316	18·078	10·766	15·788	10·380					
14. TOTAL OF TWO PRECEDING ...	38·273	44·646	51·678	42·126	50·728	42·425	51·000	61·147	54·216	59·2	60·3
15. TOTAL EXPENDITURE ...	52·721	57·907	62·510	63·565	75·929	75·817					
16. Value of piece-goods exported, per trade returns ...	33·422 per lb.	38·744 per lb.	42·142 per lb.	37·580 per lb.	52·972 per lb.	53·022 per lb.	56·745 per lb.	57·760 per lb.	63·467 per lb.	61·468 per lb.	59·730 per lb.
17. Price of middling Upland. Pence	7	7	6·56	9·06	$10\frac{1}{2}$	$12\frac{1}{8}$	$9\frac{15}{16}$	$8\frac{9}{16}$	$10\frac{9}{16}$	9	8
18. Price of 40 mule twist. Pence	...	...	...	...	$14\frac{7}{8}$	$16\frac{15}{16}$	$14\frac{7}{8}$	$13\frac{1}{2}$	$15\frac{3}{8}$	14	$12\frac{15}{16}$
19. Price of shirtings, $8\frac{1}{3}$ lbs. Pence	$11\frac{1}{2}$	$13\frac{3}{4}$	$13\frac{3}{4}$	$13\frac{3}{4}$	$14\frac{13}{16}$	$15\frac{11}{16}$	$14\frac{11}{16}$	$13\frac{7}{16}$	$14\frac{3}{16}$	$13\frac{5}{8}$	$12\frac{1}{2}$

38. The margin between the price of raw cotton and that of shirtings was 4½*d.* a lb in 1858, 6¾*d.* to 7*d.* in 1859 and 1860, and 4½*d.* in 1874. In 1872 to 1874 a larger amount of capital was required for buying 48 to 40 millions sterling of raw cotton against £25 to £28 millions from 1858 to 1860: the rate of interest has indeed fallen, but on the whole the total amount of interest must be more in the present day than in the earlier years. The information respecting wages and other expenses has not been published for any later year than 1869; the expenditure had then reverted to the mean of the amounts in 1860 and 1861, but difficulties with the operatives exist in 1875.

39. The amounts entered in line 8 as the value of goods exported exceed those shown in the returns of the Board of Trade (line 16) by some 4 or 5 millions (in 1872 by 6 millions) sterling. Assuming the home consumption for 1874 at 18 millions, the value of the total production in that year was 18+14 +60 millions=92 millions. Taking off 4 millions (too little) for loss by exchange on one-half of this, there remain 88 millions, of which 40 were expended for raw cotton. The remainder, *viz.*, 48 millions, would remain for interest on capital and other expenses, against 51½ millions for the same purposes in 1860. The outlay for raw cotton, which entails a charge for interest, was 29 millions in 1860, and 40 millions in 1874; the working expense for manufacturing 1,226 millions of pounds of raw cotton in 1874 must have been necessarily greater than that for manufacturing 1,079 millions of pounds in 1860. It is evident that an outlay of above 4 millions sterling on loss by exchange, which, if thrown on the consumer, must restrict the trade and stimulate local manufactures, may make all the difference to Manchester between a paying and an unprofitable business.

APPENDIX F.

MISCELLANEOUS EXTRACTS.

		PARAS.
1.	Obligations of Government under the permanent settlement ...	1 to 28
2.	The permanent settlement ought to be scrupulously observed both in letter and in spirit, but this does not exclude the right, on the part of Government, which is essential to the true interpretation of all such transactions, to take into consideration the gradual alteration produced by time and circumstances, and the influence of surrounding facts.	8
3.	By the letter of the contract, the orders fixing the assessment were to be considered as irrevocable, and as "not liable to alteration by any "persons whom the" (extinct) "Court of Directors may hereafter "appoint to the administration of their affairs in this country."	19
4.	By the spirit of the contract, as defined by the Secretary of State, "the great object and purpose of the permanent settlement, as "clearly defined and described in Act VI, was, as that article ex- "plains at length, to put an end for ever to the practice of all former "Governments, of altering and raising the land tax 'from time to "'time,' so that the landholder was never sure, for any definite "period, what proportion of the total produce of the soil might be "exacted by the State. This uncertainty was set at rest for ever, by "the assurance and guarantee, that no demand would be made by "the present or any future Government '*for an augmentation of the* "'*public assessment*' *in consequence of the improvement of their respect-* "*ive estates* by the zemindars.	26
5.	Seignorage, according to the Indian practice, does not overvalue the coin; but were it to be regulated by English ideas of seignorage, the coin would be overvalued by being rated, as legal tender, at more than its intrinsic value.	29 to 36
6.	In imposing a duty on coins to defray the expense of coinage, Government merely gets back the equivalent of the additional value conferred by the process on bullion.	32

APPENDIX F.

MISCELLANEONS EXTRACTS.

The Permanent Settlement.

1. The Hon'ble MR. STEPHEN said:—MY LORD, "As it is one of the objects of the Bill now under the consideration of the Council to authorize the Local Government of the North-West Provinces to impose cesses for certain specified purposes upon the permanently settled districts of these provinces, and as many persons have maintained that the imposition of such cesses, either upon these provinces or upon the province of Lower Bengal, is a breach of the pledge given at the Permanent Settlement, I desire to make some observations upon the character of that famous transaction with the view of showing that the present measure in no way interferes with any pledge then given, and that the moral right of the Government to impose such cesses, if it thinks them necessary, is as unquestionable as its legal right to do so.

"What I have to say upon this matter applies, of course, in the first instance, to the permanently settled districts of the North-West, but it applies with equal force to Lower Bengal.

2. "The character of the pledges given at the Permanent Settlement, and the degree in which those pledges still continue to bind the hands of the Government of India, both in their executive and in their legislative capacity, have been of late years the subject of much discussion.

"Many arguments have been advanced upon the subject in the public Press and elsewhere, which I have read with regret, partly because they appear to me calculated to shake the confidence of the Natives in the good faith of the British Government, and partly because they are usually founded upon an imperfect and one-sided apprehension of important truths; and it may be well if I say a few words upon these arguments in the first instance, before I state my own view as to the true purport of the Permanent Settlement and its bearing upon the measure now before the Council, and other measures of the same character which there may or may not be occasion to introduce into the Legislative Council of the Lieutenant-Governor of Bengal.

3. "I have seen and read allegations that, as permanency can hardly be regarded as an attribute of human arrangements, and as no one generation of lawgivers can irrevocably bind another to a certain course of conduct, it is idle to object to any law on the ground that it is a violation of the pledges given at the Permanent Settlement. Who, it has been asked, was Lord Cornwallis, that he should be able, in 1793, to tie the hands of his successors in 1871, and to force them to maintain an arrangement made by him, whether they think it a good one or a bad one, merely because he made it? There have been, it is alleged, in Europe and even in England, abundance of laws which have been described as irrevocable, fundamental and incapable of alteration. For instance, the Act of Union between England and Scotland assumes this character, and declares, amongst other things, that the Established Churches of England and Scotland are to be maintained inviolate; but does any one seriously believe that Parliament, if it thought fit to do so, might not reconsider the relations of Church and State both in England and in Scotland and recast those establishments according to the views of general expediency which it might entertain, or even abolish them altogether, notwithstanding the strongest expressions which were, or which could have been, introduced into the Act of Queen Anne? How can a Regulation made by the East India Company claim a degree of sanctity which does not attach to the Acts of the Parliaments of two Kingdoms, which Acts formed, so to speak, the title-deed on the faith of which each surrendered its independent existence in order to merge it in a common whole?

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4. "The writings of some of the most popular and influential of the authors who have treated of late years of the principles of jurisprudence may be quoted in support of these views. Mr. Austin, for instance, teaches expressly that, if any one legislature affects to tie the hands of its successors, it affects to do that which is beyond its power. Law is law, because it is the expression of the will of those who have the power to enforce it; but those who are dead and gone have no longer the power to enforce any thing at all. Hence, the laws which they made are laws only in so far as their successors accept and enforce them, and lose their character as law when their successors refuse to carry them out. Applying this to the Permanent Settlement, it may be said, it is not to Lord Cornwallis and his advisers, but to those who rule India in the present day, that the Permanent Settlement owes its authority. How, then, can they be debarred by restrictions of Lord Cornwallis from entering upon the question whether or not the Permanent Settlement was and is beneficial?

5. "As I said, I have seen these arguments used with regret, and with the more regret because they undoubtedly have a certain substratum of truth. The objection to the theory of which they are applications is, not that it is false, but that it is partial; that it applies to legal right and wrong, and does not deal with the question of moral right and wrong. It is no doubt of the highest importance in all inquiries into jurisprudence to keep these points distinct, and to bear in mind the fact that the legality of a particular measure depends, generally speaking, upon considerations wholly distinct from those which determine its morality; but it is even more important to remember that, just because moral and legal questions are distinct, the moral propriety of a proposed measure may require justification, even after its legality has been established beyond question.

6. "With reference to the present matter, it may, I think, be affirmed with perfect truth that Your Lordship and the Council have the legal power to repeal Regulation I of 1793, which embodies the Permanent Settlement, just as you have the legal power to do a vast number of other things, good or bad; but whether you have the moral right to do it, and whether the particular measure now before the Council purports to do anything of the sort, are separate questions which require independent consideration.

7. "In considering the question of the moral right of the Government to alter the arrangements made at the Permanent Settlement, it appears to me that the leading consideration to be kept in view is as follows: We are not a representative Government. With every wish on the part of every member of the Government to use his powers for the benefit of those whose interests they affect, it is impossible not to feel at every turn how great are the differences between the governors and the governed, and how supremely important it is for all parties that, whatever else the people of the country may feel about their rulers, they should feel perfect confidence in their good faith and in their scrupulous observance of their promises. A really representative Government may deal with the pledges of their predecessors in a very different way from a Government like ours. If Parliament, representing as it does the views and feelings of the population of the United Kingdom, should see fit to re-open the question of the Scotch and English Church Establishments, it would be absurd to say that they were debarred from doing so by the Act of Queen Anne. They are themselves the representatives of the descendants of those by whom the Act of Union was passed, and they have the same moral right to undo what their predecessors did in a matter affecting the English nation for the time being, as a man has to re-consider resolutions which he has made at any particular period of his life as to his own subsequent conduct, in matters in which he has entered into no contract with others. We, on the other hand, are in a position more nearly resembling that of a person who has made a contract to his release from which the consent of the other party is necessary. Those to whom we succeed, and whose policy laid the foundations of the power which we possess, deliberately gave to a large and influential class of the population over which we exercise that power, a pledge on the faith of which relations have grown up which modify the whole frame-work of society. I do not say that these arrangements can never be altered. I do not say that Lord Cornwallis and his colleagues had the power to make an everlasting decree

which could never be broken. I carefully avoid the expression of any opinion whatever as to the wisdom, or as to the effects, of his policy. But I do say, as emphatically as I can, that the Permanent Settlement ought to be scrupulously observed, both in letter and in spirit, till the Natives of the country, the descendants or representatives of those with whom it was made, express in some distinct, unequivocal manner their deliberate and general wish that the question should be re-opened. This must be taken with the further remark, to which I shall return, that the pledges in the Settlement must be reasonably construed. It is, as I shall show, possible to put upon them a construction which would render it necessary to consider the question of our moral duty to keep them, for that there are limits to that duty cannot be doubted. I do not think that the bare opinion of the Government, or of the European community, that the Permanent Settlement is injurious to the prosperity of Bengal, supposing such an opinion to exist, would justify its re-consideration. Under the circumstances of the case, I think that, before they could justly set it aside, the Native community ought to be of the same opinion; and holding this view, it is almost needless to add that the arguments which go to prove our legal power to repeal it appear to me to be beside the mark. They are like arguments to show that our legal powers would extend to the enactment of laws for religious persecution or any other enormity. It is idle, and it may be mischievous and dangerous, to discuss the question whether we have the legal right to do that which a sense of honour and justice forbid us to do. The Permanent Settlement.

8. "Before I leave this part of the subject, I must add one further remark. When I say that, in my opinion, the Permanent Settlement ought to be scrupulously observed both in letter and in spirit, I do not mean to exclude the right on the part of the Government, which is essential to the true interpretation of all such transactions, to take into consideration the gradual alteration produced by time and circumstance and the influence of surrounding facts. A great public act like the Permanent Settlement is not to be interpreted, and can never have been meant to be interpreted, merely by reference to the terms of the document in which it is contained. Its meaning must be collected from a consideration of the circumstances under which, and of the objects for which, it was made; and in considering what is, and what is not, consistent with its terms, we must look at the gradual changes which have occurred in the condition of the country since it was enacted. This is the only way in which it is possible to understand fully transactions of this kind, and it is peculiarly necessary in the case of a transaction which, however important, neither is nor professes to be a complete and exhaustive statement of the relations between the Government and its subjects. The Permanent Settlement regulates only one branch of one part of those relations, and it must be interpreted by reference to others.

9. "From these preliminary remarks I pass to the consideration of the character of the Permanent Settlement itself. The matter was so fully discussed before the Regulation of 1793 was passed, and the Regulation itself is so explicit, that little room is left for doubt as to the intentions of those by whom it was framed.

10. "I have examined a considerable number of papers on the question, many of which are contained in the well-known Fifth Report of the Select Committee on the Affairs of the East India Company, and in the Appendix to it, published in 1812, when the question of the renewal of the Company's Charter, which took place in 1813, was under consideration. Others are to be found elsewhere; but it appears to me that the pith of the discussion from which the Permanent Settlement resulted is to be found in the papers to which I have referred, and particularly in the extremely elaborate productions of Lord Teignmouth (then Mr. Shore) and Mr. James Grant, and in the shorter but not less remarkable Minutes of Lord Cornwallis. The study of these documents and of the Permanent Settlement itself leave no room at all, as it appears to me, for doubt as to its purport.

11. "Before I discuss the terms of the Regulation in which the Permanent Settlement is contained, I will give, very shortly, some account of the controversy which led to it. Two principal questions were discussed: the question, what was the position of the zamíndárs? and the question whether it was desirable to

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make the settlement with them permanent? It was maintained on the one hand, and in particular by Mr. Shore (afterwards Lord Teignmouth), that the zamíndárs were proprietors of the soil, subject however to the payment to the Government of a demand which had been considerably enlarged on many occasions since the assessment made by Tury Mull, the Minister of Akbar. Mr. Shore's opinion as to the position of the zamíndárs is stated in these words of his Minute:—

"'370. I consider the zamíndárs as the proprietors of the soil, to the property of which they succeed by the right of inheritance, according to the laws of their own religion; and that the sovereign authority cannot justly exercise the power of depriving them of the succession, nor of altering it when there are any legal heirs. The privilege of disposing of the land by sale or mortgage is derived from this fundamental right and was exercised by the zamíndárs before we acquired the Díwání.'

* * * *

"'372. The revenues of the land belong to the ruling power, which, being absolute, claimed and exercised the right of determining the proportion to be taken for the State.'

12. "Mr. Grant, on the other hand, contended that the State, and not the zamíndárs, was the proprietor of the land:

"'The sovereign ruler in all parts of Hindústán, if not through the whole of Asia, unless it be in the Russian dominions, is declared to be the sole virtual proprietor of the soil; not in the European feudal acceptation of the term, agreeable to which it hath lately been attempted to be qualified, implying a fictitious tenure as lord paramount, from whom all lesser holdings are supposed to be derived by every class of subjects, but in right and fact the real acting landlord, entitled to, and receiving from, the ryots or husbandmen a certain portion of the gross yearly returns of the country in money or kind, fixed on a medium in Bengal at one-fourth of the whole produce.'

13. "I need not refer to the prolonged and detailed investigations by which these views respectively were supported, nor to the different practical inferences drawn from them by those who held them. I pass over these matters, which, though of much interest on various accounts, do not bear on the point now immediately before the Council—the meaning of the pledge subsequently given,—and I turn to the Minutes recorded on the subject by Lord Cornwallis. Upon reading these Minutes, it is, I think, quite impossible not to perceive that the great object which Lord Cornwallis had in view was that of creating property in land. He was perfectly well aware of the difficulties of the subject. He was repeatedly warned by his various advisers of the extremely intricate state of things with which he had to deal; but he was immoveably convinced that the introduction of the English system of permanent property in land and the English relation of landlord and tenant was the one thing essential to the prosperity of Bengal. I will read two passages—one from a Minute of Mr. Shore, the other from a Minute of Lord Cornwallis—which set this in a very clear light.

14. "In a Minute dated 8th December 1789 Mr. Shore observes:—

"'The most cursory observation shows the situation of things in this country to be singularly confused. The relation of a zamíndár to Government, and of a ryot to a zamíndár, is neither that of a proprietor nor a vassal—but a compound of both. The former performs acts of authority unconnected with proprietary right; the latter has rights without real property; and the property of the one and the rights of the other are, in a great measure, held at discretion. Such was the system which we found, and which we have been under the necessity of adopting. Much time will, I fear, elapse before we can establish a system perfectly consistent in all its parts, and before we can reduce the compound relation of a zamíndár to Government, and of a ryot to a zamíndár, to the simple principles of landlord and tenant.'

15. "In his previous Minute of 18th September 1789, Lord Cornwallis had said:—

"'Although I am not only of opinion that the zamíndárs have the best right, but from being persuaded that nothing could be so ruinous to the public interest as that the land should be retained as the property of Government, I am also convinced that, failing the claim of right of the zamíndárs, it would be necessary for the public good to grant a right of property in the soil to them or to persons of other descriptions. I think it unnecessary to enter into any discussion of the grounds upon which their right appears to be founded.'

16. "Lord Cornwallis appears to have acted on this view notwithstanding the information afterwards given to him by Mr. Shore in the passage first quoted.

17. "Shortly, the official papers which preceded the enactment of the Permanent Settlement leave on my mind a very simple and definite impression. The legislators of that day found themselves in the presence of a state of things with which the best informed amongst their number perceived themselves to be very imperfectly acquainted, which they perceived to be exceedingly intricate and unlike anything to which they were accustomed, but in which they distinctly perceived three leading points. These leading points were:— The Permanent Settlement.

"(1). That the zamíndárs were the most conspicuous of the numerous persons who were interested in the land.

"(2). That intricate and imperfectly understood relations existed between them and the ryots.

"(3). That the right of the Government to exact a share of the produce of the land, ascertained by no fixed rule and varying from time to time in proportion to the increased yield of the land, was practically inconsistent with the existence of rights of private property, and reduced the value of such rights, where they existed, to a shadow.

18. "Lord Cornwallis somewhere observes, though I cannot at this moment give his exact words, that the question whether zamíndárs were or were not proprietors must be 'very uninteresting' to them, if the admission that they were proprietors was coupled with a claim to the growing value of their lands as it accrued.

19. "The great object of the Permanent Settlement was to put an end to this uncertain, indefinite, and fluctuating state of things, and to substitute for it a system of permanent property, in which the zamíndárs were to be landlords on the English model, the ryots tenants also on the English model, and in which the land-revenue was to form a permanent rent-charge of fixed amount, to be paid to the Government by the zamíndar. I need not enter into the subject of the provisions which expressly reserved to the Government the right of interfering between the zamíndár and the ryot to protect the interests of the latter. This, I think, appears as clearly as anything can from the language of the Permanent Settlement itself, the important parts of which I will now proceed, with the permission of the Council, to read:—

"'*Section* 4.—The Governor General in Council accordingly declares to the zamíndárs, independent taluqdárs, and other actual proprietors of land, with or on behalf of whom a settlement has been concluded under the Regulations abovementioned, that, at the expiration of the term of the settlement, no alteration will be made in the assessment which they have respectively engaged to pay, but that they and their heirs and lawful successors will be allowed to hold their estates at such assessment for ever.'

"'*Section* 7.—It is well known to the zamíndárs, independent taluqdárs, and other actual proprietors of land, as well as to the inhabitants of Bengal, Behar and Orissa in general, that from the earliest times until the present period the public assessment upon the lands has never been fixed; but that, according to established usage and custom, the rulers of these provinces have from time to time demanded an increase of assessment from the proprietors of land; and that, for the purpose of obtaining this increase, not only frequent investigations have been made to ascertain the actual produce of their estates, but that it has been the practice to deprive them of the management of their lands, and either to let them in farm, or to appoint officers on the part of Government to collect the assessment immediately from the ryots. The Honourable Court of Directors, considering these usages and measures to be detrimental to the prosperity of the country, have, with a view to promote the future ease and happiness of the people, authorized the foregoing declarations; and the zamíndárs, independent taluqdárs, and other actual proprietors of land, with or on behalf of whom a settlement has been, or may be concluded, are to consider these orders fixing the amount of the assessment as irrevocable and not liable to alteration by any persons whom the Court of Directors may hereafter appoint to the administration of their affairs in this country.'

"'The Governor General in Council trusts that the proprietors of land, sensible of the benefits conferred upon them by the public assessment being fixed for ever, will exert themselves in the cultivation of their lands, under the certainty that they will enjoy exclusively the fruits of their own good management and industry, and that no demand will ever be made upon them, or their heirs or successors, by the present or any future Government, for an augmentation of the public assessment in consequence of the improvement of their respective estates.'

20. "This is further explained by the following passage from the preamble to Regulation II of 1793:—

"'Experience having evinced that adequate supplies of grain are not obtainable from abroad in seasons of scarcity, the country must necessarily continue subject to these calamities until the proprietors and cultivators of the lands shall have the means of increasing the number of the

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reservoirs, embankments, and other artificial works by which, to a great degree, the untimely cessation of the periodical rains may be provided against, and the lands protected from inundation; and, as a necessary consequence, the stock of grain in the country at large shall always be sufficient to supply those occasional but less extensive deficiencies in the annual produce, which may be expected to occur, notwithstanding the adoption of the above precautions to obviate them. To effect those improvements in agriculture which must necessarily be followed by the increase of every article of produce, has accordingly been one of the primary objects to which the attention of the British Administration has been directed in its arrangements for the internal government of these provinces. As being the two fundamental measures essential to the attainment of it, the property in the soil has been declared to be vested in the landholders, and the revenue payable to Government from each estate has been fixed for ever. These measures have at once rendered it the interest of the proprietors to improve their estates, and given them the means of raising the funds necessary for that purpose. The property in the soil was never before formally declared to be vested in the landholders, nor were they allowed to transfer such rights as they did possess, or raise money upon the credit of their tenures, without the previous sanction of Government.' * * * 'When the extension of cultivation was productive only of a heavier assessment, and even the possession of the property was uncertain, the hereditary landholder had little inducement to improve his estate, and monied men had no encouragement to embark their capital in the purchase or improvement of land, whilst not only the profit, but the security for the capital itself, was so precarious. The same causes, therefore, which prevented the improvement of land, depreciated its value.'

21. "This is the pledge given at the Permanent Settlement, and this the contemporary comment upon that pledge, contained in another Regulation of the same date; and the question is, whether the Act now before the Council contains any violation of it. The Act before the Council provides, in substance, that a cess of two annas an acre shall be laid upon the permanently settled lands in this province, for the purpose of providing for the following objects,—Roads, Police, Education and Minor Public Works, in the North-West Provinces, and in each district of those provinces; and this is said to be a violation of the pledge that the public assessment is to be fixed for ever.

22. "It appears to me that such a contention is wholly incorrect. Those who maintain it must maintain that no tax whatever, for any purpose whatever, can under any circumstances be laid upon the produce of the lands subject to Permanent Settlement, other than the assessment fixed by the Permanent Settlement itself.

"I say that this is a complete mistake; that it is a proposition which would be monstrous, and fraught with disaster to the country, if it were true, but which, happily, is altogether unfounded.

"Of its consequences to the country, if it were true, I need not speak at any length. It would simply put a stop to all public improvement in the permanently settled districts, and keep them at that low stage in which they were at the end of the last century; unless, indeed they were improved at the expense of other parts of the country, for improvement of all kinds involves more or less expense, which again involves taxation.

23. "I have already observed that no one is more strongly impressed than I with the importance of scrupulously maintaining the pledges given at the period of the Permanent Settlement; but it is undoubtedly possible to construe those pledges in a manner so extravagant, as to raise the question whether they were pledges which the Government of that day had any moral right to make, for legal right they could have none. If Lord Cornwallis had, in direct words, engaged that a certain scheme of taxation, settled by him, should be permanent, and that no other taxes whatever should ever be raised in the territory to which it applied, it would have been necessary to look this question in the face. As it is, I do not think there is any necessity for discussing it; and I refer to it only in order to suggest to those who claim the fulfilment of the pledge given in 1793, that it is very unwise in them to put upon it a sense which might sooner or later force upon the Government the alternative of permanently arresting the improvement of Bengal, or of declaring that Lord Cornwallis had given a pledge which he had neither the legal power nor the moral right to give.

"I merely glance at this question; and I am glad to be able to put it on one side, and to point out the reasons which lead me to believe that the pledge given at the Permanent Settlement had no such meaning as that which certain persons now put upon it.

24. "It seems to me to follow, from the authorities to which I have referred, that the Permanent Settlement was neither more nor less than the establishment of a general proprietary system, by which the property in the land was distributed between three classes of persons,—the Government, the zamíndárs, and the ryots. To use the terms of English law, it gave to the Government a fixed and permanent rent-charge; to the zamíndárs the freedhold, and to the ryots interests of various kinds, which were left in a state of uncertainty at the time of the Permanent Settlement, and were afterwards defined by Act X of 1859. It appears to me to have left the whole question of taxation entirely untouched. It is essential to understand this matter clearly, as it is the point upon which the whole subject turns. The land-revenue is, in my opinion, neither rent nor taxation. It is the property of the Government, just as the Crown lands in England are the property of the Queen; and the existence of a right to impose taxes for the general good upon all other property, whether derived from land or from other sources, is no more inconsistent with this proprietary right in the one case than in the other. The fact that the Crown owns the New Forest in Hampshire is no reason whatever why the rest of the land of Hampshire should not be taxed when the public good requires it; and the fact that the Government owns a rent-charge issuing out of all the land in Bengal is no reason why the rest of the produce of the lands should not be taxed when the public good requires it. The Permanent Settlement.

25. "It may be asked, what good there was in the Permanent Settlement; what great benefit it conferred upon the landholders of Bengal, if it left their property subject to taxation? The answer is, that it reduced to a certainty one particular charge on the land, which had previously been of variable amount, and so freed the landholders from uncertainty which had previously hung over them in respect of it.

"Under the old system of land-revenue, worked as it was by the old Governments, it was at all events a debatable question whether the zamíndárs had any private property in the land at all. Not only was this question debatable, but it was hotly debated; and I think that any one who reads the papers which were written to show that the zamíndárs were mere farmers of the revenue, will be obliged to own that much may be said in support of that opinion. Since the Permanent Settlement, their proprietary right has been undoubted; and the line between their property and that of the State has been clearly defined, and is no longer subject to increase 'in consequence,'—to use the words of the Permanent Settlement itself—'of the improvement of their respective estates.'

26. "To affirm that, because the line has been drawn between the State's share, the zamíndárs' share, and the ryots' share, in the land, the shares of the zamíndár and the ryot have been freed from all further liability to taxation, is nothing less than to argue that, by the act of creating property in land, and defining the extent of that property, the Government relieved the property which it had so created and defined from that which is the common liability of all property in all countries and under every possible system of Government—the liability to taxation. I hardly know how to argue against such a confusion of thought: but it is exposed as clearly as it can be exposed in the following paragraphs of a despatch upon this subject from the Secretary of State to the Governor General in Council, dated 12th May 1870. They are as follows:—

"'The great object and purpose of that (*i. e.*, the Permanent) Settlement, as clearly defined and described in Article VI, should govern our interpretation of its terms. That object was—as this Article explains at length—to put an end for ever to the practice of all former Governments, of altering and raising the land-tax 'from time to time,' so that the landholder was never sure, for any definite period, what proportion of the total produce of the soil might be exacted by the State. This uncertainty was to be set at rest for ever. The 'Public Demand' was to be fixed and permanent. Such was the promise:—and its scope and object were clearly explained in the concluding exhortation addressed to the landowners, that 'they would exert themselves in the cultivation of their lands, under the certainty that they would enjoy exclusively the fruits of their own good management, and that no demand would ever be made upon them or their heirs and successors, by the present or any future Government, *for an augmentation of the public assessment in consequence of the improvement of their respective estates.*'

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"'10. These last words illustrate the whole force of the argument which has been admitted to be just in the case of the income-tax. It must be remembered that none of the pleas which, in the correspondence before me, are urged in favour of the right of the Government to levy rates for Roads or for Education, could have been put forward in favour of the right to impose an income-tax on the landholders of Bengal. The income-tax was not 'local' in any sense. It was not applied to special purposes, intended for the immediate benefit of the agricultural classes. It was, in the fullest sense of the words, a 'public demand,' levied over and above the public demand which, under the Permanent Settlement, had been fixed 'for ever.' It went directly into the imperial exchequer, and was applied precisely as the land-revenue and all the imperial taxes were applied. But there is one thing which that tax was not:—it was not an increase of the public demand, levied upon the zamíndárs 'in consequence of the improvement of their estates.' It was levied upon a wholly different principle, and in respect of a wholly different kind of liability. One index and proof of this difference lay in the fact that although this 'public demand' was made upon those to whom the promises of the Permanent Settlement had been given, it was made upon them only in company with other classes of the community, and with no exclusive reference to the source from which their income was derived.'

"'11. But when the principle of this distinction is clearly apprehended, it becomes obvious that an income-tax is not the only form of 'public demand' to which that principle applies. The same essential distinction may be established between the original assessment which was fixed 'for ever,' and every kind of tax, or cess, or rate, which is levied irrespective of the increased value or produce of land, and with no view to a re-adjustment of the proportions in which the produce of the soil is divided between the State and the owners of land holding under it. The best method of marking this distinction, and of making it clear, is to provide that such cesses should be laid upon the owners of land only in common with other owners of property which is of a kind to be assessable to the rate.'

27. "This authoritative ruling of the Secretary of State appears to me to be so forcible, that I should only weaken it by adding to it anything of my own. I may, however, compare it with a passage from one of Lord Cornwallis' Minutes, which throws a curious light on the subject. It shows distinctly what he had in his mind at the time when the Settlement was framed, and that he recognized in the clearest way the difference between land-revenue and taxation.

"'Although Government has an undoubted right to collect a portion of the produce of the lands to supply the public exigencies, it cannot, consistently with the principles of justice and policy, assume to itself a right of making annual or periodical valuations of the lands, and taking the whole produce, except such portion as it may think proper to relinquish to the proprietors for their maintenance and for defraying the charges of managing their estates.

"'The supreme power in every State must possess the power of taxing the subject agreeably to certain general rules; but the practice which has prevailed in this country for some time past, of making frequent valuations of the lands, and, where one person's estate has improved and another's declined, of appropriating the increased produce of the former, to supply the deficiencies in the latter, is not taxation, but in fact a declaration that the property of the landholder is at the absolute disposal of Government. Every man who is acquainted with the causes which operate to impoverish or enrich a country, must be sensible that our Indian territories must continue to decline as long as the practice is adhered to.'

28. "These considerations and authorities appear to me to establish beyond all doubt the broad proposition, that the general right of the Government to tax the produce of the land, amongst other forms of property, was altogether unaffected by the Permanent Settlement, and that the pledge then given was simply this—that the Government would for ever abandon a mode of providing for public wants which was regarded as incompatible with the existence of private property and destructive of all motives for industry."

29. SEIGNORAGE.—The English conception of seignorage, which prevails in the minds of English statesmen and English writers on Political Economy, is different from the Indian. In India the coin is not over-valued by the amount of seignorage levied on it:—the coin contains the full weight of fine metal for which it passes current as legal tender, and the seignorage is a separate charge. In this way the merchant who carries bullion to the mint pays seignorage; but for the coin which he carries away in exchange, he recovers, from the next holder of it, no more than the value at which the pure contents of the coin are rated in the currency. Accordingly, this second holder, if wishing to export the coin, would not lose seignorage, for that will have been separately paid, outside the value of the coin, by the first importer, while the second holder will get back the value of the fine silver in the coin, which was all that he paid for it.

30. Thus, if a merchant carries to an Indian mint 1,000 lbs. of standard silver for 1,000 lbs. worth of rupees, he will get a number of rupees which contain fully one thousand pounds worth of standard silver, but he must

deposit in addition 20 lbs. of standard silver as two per cent. seignorage. Were the transaction regulated by English ideas of seignorage, the merchant would get back the same number of rupees containing only 980 lbs. of standard silver, but which would be rated as currency, *i. e.*, as legal tender, as if containing 1,000lbs. of standard silver. By this arrangement the merchant, and the subsequent holders of the coin, would sustain a loss equal to the seignorage, on exportation of the coin. It is necessary to keep in view this distinction between English ideas and the Indian practice of seignorage, in perusing the following extracts on the subject of seignorage:— Seignorage.

31. "In 1816 (56 Geo. III) a seignorage of 6·45 per cent. was imposed on the silver coinage, by coining into 66 shillings, by tale, the troy pound weight of silver (11-2 fine) worth, intrinsically, only 62 shillings. In other words, the silver coinage becomes, in effect, tokens;—and the public was protected by a prohibition of the legal tender of silver coins for more than 40 shillings" History of Prices, vol. 6, page 420.

32. "Much difference of opinion has, however, existed in regard to the policy of imposing a tax on coins. It has been contended that they ought, in no circumstances, to be charged with any duty: but that the expenses of the mint should always be defrayed by the public. In this opinion we cannot concur. The reasoning of Adam Smith, in favor of a moderate seignorage, appears to be quite unanswerable. A sovereign is more serviceable than a piece of pure unfashioned gold bullion of the same weight; for, while it is equally well-fitted for being used in the arts, it is—what bullion is not—money of legal tender. In imposing a duty or seignorage on coins to defray the expense of coinage, *Government merely gets back the equivalent of the additional value conferred by the process on bullion.* And the truth is that those who carry gold to the mint would have no better reason for complaint were they charged with the expense of its coinage, than they would have, had they sent it to a jeweller's, that they were charged with expense of its manufacture into plate. (McCulloch.)

33. (In what follows, the English conceptions of seignorage should be kept in mind). "But there are other reasons why a seignorage ought to be exacted. Wherever the expense of coinage is defrayed by the State, gold or silver coins, and gold or silver bullion, are very nearly of the same value. And hence, whenever it becomes profitable to export the precious metals, coins, in the manufacture of which a considerable expense has been incurred, are sent abroad indifferently with bullion. It has sometimes been attempted, by prohibiting the exportation of coins, to prevent the loss that may thus be occasioned; but these efforts having proved singularly ineffectual, have been abandoned in this and most other countries. Admitting, however, that it were possible, which certainly it is not, to prevent or materially limit the clandestine exportation of coins, it is conceded on all hands to be quite nugatory to attempt to prevent their conversion into bullion. In this there is almost no risk. And the security with which their fusion may be effected, and the trifling expenses attending it, will always enable them to be melted down and sent abroad whenever there is any unusual foreign demand for the precious metals. This exportation would, however, be either prevented or materially diminished by the imposition of a seignorage or duty equal to the expense of coinage. Coins being by this means rendered more valuable than bullion, it would be sent abroad in preference to them, in the event of the exchange becoming unfavorable, or of gold becoming a suitable article of export. And if, as Adam Smith has observed, it became necessary on any emergency to export coins, they would most likely be re-imported. Abroad, they are worth only so much bullion; while at home they are worth this much plus the expense of coinage. There would, therefore, be an obvious inducement to bring them back; and the supply of currency would be maintained at its proper level, without its being necessary for the mint to issue fresh coins. (McCulloch.)

34. "Suppose the seignorage were two per cent., then any given weight of "coins of the mint standard ought, provided the currency be not redundant, "to purchase two per cent. more than the same weight of bullion. So long, therefore, as this proportion is preserved between money and bullion, it shows

Seignorage. "that the proper supply of currency has been issued. If the value of the coins "declines below this limit, too many of them must have got into circulation; "and if, on the contrary, their value rises above it, the supply is too limited, "and an additional quantity may be advantageously issued.

"It must not, however, be concealed, that if it were attempted to charge "a high seignorage, it would be extremely difficult, or rather quite impractica- "ble, to limit the supply of coins. The inducement to counterfeit money "would, under such circumstances, be very greatly increased, while the chances "of detection would be very much diminished. It would not then be necessary "to make the counterfeiting of coins profitable, that they should be manufac- "tured of base metal. The saving of a heavy charge on account of seignorage "might of itself afford a sufficient profit; and this would be derived, though "the metal contained in the forged coins were of the standard purity. But "though it might, for this reason, be impossible, or very difficult, to limit the "supply of currency, and consequently to sustain its value, were any thing like "an exorbitant seignorage charged, the same difficulty would not stand in "the way of a moderate seignorage. To be carried on the business of counter- "feiting must yield a premium sufficient to indemnify the forgers for the risks "and odium to which they are exposed. A seignorage insufficient to do this "would not encourage the issue of counterfeit coins. And though it might be "difficult to form any very precise estimate of the amount of the premium "referred to, it would not probably be under two or three per cent."

35. If Government, however, throws the expense of coinage, as is reasonable, upon the holder, by making a charge to cover the expense (which is done by giving back rather less in coin than has been received in bullion, and is called levying a seignorage), the coin will rise to the extent of the seignorage, above the value of the bullion. If the mint kept back one per cent., to pay the expense of coinage, it would be against the interest of the holders of bullion to have it coined, until the coin was more valuable than the bullion by at least that fraction. The coin, therefore, would be kept one per cent. higher in value, which could only be by keeping it one per cent. less in quantity, than if its coinage were gratuitous. (Mr. J. S. Mill).

36. The Government might attempt to obtain a profit by the transaction, and might lay on a seignorage calculated for that purpose;—but whatever they took for coinage beyond its expenses, would be so much profit on private coining. Coining, though not so easy an operation as melting, is far from a difficult one, and, when the coin produced is of full weight and standard fineness, is very difficult to detect. If, therefore, a profit could be made by coining good money, it would certainly be done;—and the attempt to make seignorage a source of revenue would be defeated. Any attempt to keep the value of the coin at an artificial elevation, not by a seignorage, but by refusing to coin, would be frustrated in the same manner. (Mr. J. S. Mill).

37. In August or September 1869, it will be remembered, Mr. Lowe threw out a suggestion that to cover the expense of coinage and to check the exportation of sovereigns of full weight, whereby the English metallic currency had come to include 31 per cent. of light coin, a seignorage of nearly one per cent. on the coinage of sovereigns should be levied, by exacting from the public the same price, as now, for gold, and at the same time reducing the weight of the sovereign from 123·274 grains to 122·274 grains, or 122·25 grains.

TABLE 1.

FOREIGN TRADE OF BRITISH INDIA (MERCHANDISE) IN EACH YEAR FROM 1850-51 TO 1874-75, DISTINGUISHING THE AMOUNTS FOR CHINA AND THE EASTERN SETTLEMENTS FROM THE AMOUNTS FOR OTHER FOREIGN COUNTRIES.

MERCHANDISE.

	Foreign Countries, except China and Eastern Settlements.			China and Eastern Settlements.			Total.		
	Imports.	Exports.	Excess of Exports.	Imports.	Exports.	Excess of Exports.	Imports.	Exports.	Excess of Exports.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions	£ Millions.	£ Millions.	£ Millions.
1850-51 ...	10.119	11·144	1·025	1·440	7·020	5·580	11·559	18·164	6·605
1851-52 ...	10 929	10·648	—281	1·311	9·231	7·920	12·240	19·879	7·639
1852-53 ...	8·847	12·086	3·239	1·224	8·379	7·155	10·071	20·465	10·394
1853-54 ...	9·941	11·750	1·809	1·182	7·545	6·363	11·123	19·295	8·172
1854-55 ...	11·423	11 610	·187	1·320	7·317	5·997	12·743	18·927	6·184
TOTAL ...	51·259	57·238	5·979	6·477	39·492	33·015	57·736	96·730	38·994
1855-56 ...	12·683	15·534	2·851	1·261	7·505	6·244	13·944	23·039	9·095
1856-57 ..	13·166	16·948	3·782	1·029	8·390	7·861	14·195	25·338	11·143
1857-58 ...	13·762	16·672	2·910	1·516	10·784	9·268	15·278	27·456	12·178
TOTAL ..	39·611	49·154	9·543	3·806	26·679	22·873	43·417	75·833	32·416
1858-59 ...	19·641	17 374	—2·267	2·088	12·489	10·401	21·729	29·863	8·134
1859-60 ...	22·817	16·830	—5·987	1·448	11·130	9·682	24·265	27·960	3·695
1860-61 ...	21·727	20·407	—1·320	1·767	12·564	10·797	23·494	32·971	9·477
1861-62 ...	20 612	24·659	4·047	1·708	11·658	9·950	22·320	36·317	13·997
TOTAL ...	84·797	79·270	—5·527	7·011	47·841	40·830	91·808	127·111	35·303
1862-63 ...	20·513	34·205	13·692	2·119	13·655	11·536	22·632	47·860	25·228
TOTAL ...	20·513	34·205	13·692	2·119	13·655	11·536	22·632	47·860	25·228
1863-64 ...	25·119	53·191	28 072	2·027	12·434	10·407	27·146	65·625	38·479
1864-65 ...	26·033	55·258	29·225	2·118	12·769	10·651	28·151	68 027	39·876
1865-66 ...	27·788	51·752	23·964	1·811	13 739	11·928	29·599	65·491	35·892
TOTAL ...	78·940	160·201	81·263	5·956	38·942	32·986	84·896	199·143	114·247
1866-67 .	27·293	29·657	2·364	1·746	12·203	10·457	29·039	41·860	12·821
TOTAL ...	27·293	29·657	2·364	1·746	12·203	10·457	29·039	41 860	12·821
1867-68 ...	33·522	35·152	1·630	2·184	15·722	13·538	35·706	50·874	15·168
1868-69 ...	33·755	39·960	6·205	2·235	13·102	10·867	35·990	53·062	17·072
TOTAL ...	67·277	75·112	7·835	4·419	28·824	24·405	71·696	103·936	32·240
1869-70 ...	30·459	38·753	8·294	2·469	13·718	11·249	32·928	52·471	19·543
1870-71 ...	31·119	41·450	10·331	2·295	13·882	11·587	33·414	55·332	21·918
1871-72 ...	28·974	47·303	18·329	2·110	15·883	13·773	31·084	63.186	32·102
1872-73 ...	29·213	41·198	11·955	2·018	14·030	12·012	31·261	55·228	23·967
1873-74 ...	30·449	41·515	11·066	2·145	13·446	11·301	32·594	54·961	22·367
TOTAL ...	150·244	210·219	59·975	11·037	70·959	59·922	161·281	281·178	119·897
1874-75 ...	...	...	...	...	...	...	35·967	56·317	20·350

TREASURE IMPORTED INTO AND EXPORTED FROM INDIA TO AND FROM FOREIGN ALSO, AMOUNT OF HOME GOVERNMENT'S BILLS ON INDIA, THE NET CAPITAL BORROWED IN ENGLAND.

	Foreign countries, except China and Eastern Settlements.			China and Eastern Settlements.		
	Imports.	Exports.	Excess of Imports.	Imports.	Exports.	Excess of Imports.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
1850-51 ...	1·618	·541	1·277	1·994	...	1·994
1851-52 ...	2·562	·919	1·643	2·490	...	2·490
1852-53 ...	4·231	1·013	3·218	2·600	·042	2·558
1853-54 ...	4·134	·674	3·460	·738	·809	—·071
1854-55 ...	1·517	·990	·527	·511	·277	·234
Total ...	14·262	4·137	10·125	8·333	1·128	7·205
1855-56 ...	9·118	·458	8·660	2·183	·143	2·040
1856-57 ...	12·482	·744	11·738	1·932	·509	1·423
1857-58 ...	13·025	·633	12·392	2·790	·189	2·601
Total ...	34·625	1·835	32·790	6·905	·841	6·064
1858-59 ...	7·359	·602	6·757	5·458	·067	5·391
1859-60 ...	13·785	·698	13·087	2·572	·231	2·341
1860-61 ...	8·897	·927	7·970	1·780	·193	1·587
1861-62 ...	10·796	·635	10·161	4·156	·048	4·108
Total ...	40·837	2·862	37·975	13·966	·539	13·427
1862-63 ...	16·594	·988	15·606	3·915	·123	3·792
Total ...	16·594	·988	15·606	3·915	·123	3·792
1863-64 ...	19·689	1·207	18·482	3·274	·064	3·210
1864-65 ...	16·950	1·351	15·599	4·413	·094	4·319
1865-66 ...	16·368	2·091	14·277	10·189	·074	10·115
Total ...	53·007	4·649	48·358	17·876	·232	17·644
1866-67 ...	4·508	2·388	2·120	8·729	·044	8·685
Total ...	4·508	2·388	2·120	8·729	·044	8·685
1867-68 ...	3·984	1·529	2·455	7·791	·043	7·748
1868-69 ...	10·175	1·354	8·821	4·981	·042	4·939
Total ...	14·159	2·883	11·276	12·772	·085	12·687
1869-70 ..	8·204	·937	7·267	5·751	·105	5·646
1870-71 ...	2·493	2·167	·326	2·952	·054	2·898
1871-72 ...	8·786	1·260	7·526	2·788	·216	2·572
1872-73 ...	3·430	1·029	2·401	1·126	·269	·857
1873-74 ...	3·798	1·849	1·949	1·995	·065	1·930
Total ...	26·711	7·242	19·469	14·612	·709	13·903

A.—Besides £1,000,000 repaid by British Government on account of Abyssinian Expedition and £119,750

B.—Besides £5,113,500 of repayment as above.

C.— „ £1,400,867 of „ „

Comparing 1873-74 with 1867-68 there is an increase of £300,000 under instalment, and £1,200,000

COUNTRIES, IN EACH YEAR FROM 1850-51 TO 1873-74, DISTINGUISHED AS ABOVE; PAID INTO THE HOME TREASURY BY GUARANTEED RAILWAYS, AND THE AMOUNT

SURE.

TOTAL.			*a* HOME BILLS ON INDIA.	*b* RAILWAY CAPITAL PAID INTO HOME TREASURY (NET).	*c* AMOUNT BORROWED IN ENGLAND.	TOTAL OF *a*, *b*, *c*.
Imports.	Exports.	Excess of Imports.				
£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
3·812	·541	3·271	3·236	·395	...	3·631
5·052	·919	4·133	2·778	·137	...	2 915
6 831	1·055	5·776	3·317	·208	...	3·525
4·872	1·483	3·389	3·851	·379	...	4·230
2·028	1·267	·761	3·670	2·458	1·199	7·327
22·595	5·265	17·330	16·852	3·577	1·199	21·628
11·301	·601	10·700	1·484	2·002	·135	3·621
14·414	1·253	13·161	2·820	1·590	...	4·410
15·815	·822	14·993	·629	1·638	3·185	5·452
41·530	2·676	38·854	4·933	5·230	3·320	13·483
12·817	·669	12·148	·026	4·617	6·880	11·523
16·357	·929	15·428	·005	3·048	12·806	15·859
10·677	1·120	9·557	·001	3·400	4·665	8·066
14·952	·683	14·269	1·194	6·965	4·995	13·154
54 803	3·401	51·402	1·226	18 030	29·346	48·602
20·509	1·111	19 398	6·642	3·374	...	10·016
20·509	1·111	19·398	6·642	3·374	...	10·016
22·963	1·271	21·692	8·980	4·636	2·441	16·057
21·363	1·445	19·918	6·789	1·790	...	8·579
26·557	2·165	24·392	6·966	1·082	·883	8·931
70·883	4·881	·66 002	22·735	7·508	3·324	33·567
13·237	2·432	10·805	5·068	2·771	2·732	10 571
13·237	2·432	10·805	5·068	2·771	2·732	10·571
11·775	1 572	10·203	4·137	4·991	1·224	10·352*A*
15·156	1·396	13·760	3·706	4·251	1·534	9·491*B*
26·931	2·968	23·963	7·843	9·242	2·758	19·843
13·955	1·042	12·913	6·980	2·096	4·039	13·115*C*
5·445	2·221	3·224	8·444	2·354	2·424	13·222
11·574	1·476	10·098	10·310	1·202	1·413	12·925
4·556	1·298	3·258	13·939	—·659	.....	13·280
5·793	1·914	3·879	13·286	.....	.....	13·286
41·323	7·951	33·372	52·959	4·993	7·876	65·828

for China Expedition.

under gross guaranteed interest.

TABLE 3.

ANNUAL AVERAGE OF GROSS IMPORTS AND EXPORTS OF MERCHANDISE AND TREASURE, OF HOME GOVERNMENT'S BILLS ON INDIA, NET PAYMENTS OF RAILWAY COMPANIES INTO THE HOME TREASURY, AND BORROWINGS IN ENGLAND, FOR CERTAIN GROUPS OF YEARS, IN THE PERIOD FROM 1850-51 TO 1873-74.

ANNUAL AVERAGES.	1850-51 to 1854-55, 5 years.	1855-56 to 1857-58, 3 years.	1858-59 to 1861-62, 4 years.	1862-63, 1 year.	1863-64 to 1865-66, 3 years.	1866-67, 1 year.	1867-68 and 1869, 2 years.	1869-70 to 1873-74, 5 years.
I.—MERCHANDISE.								
Imports.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
Foreign Countries, except China and Eastern Settlements ...	10·252	13·203	21·199	20·513	26·313	27·293	33·639	30·049
China and Eastern Settlements	1·296	1·269	1·753	2·119	1·986	1·746	2·209	2·208
TOTAL ...	11·548	14·472	22·952	22·632	28·299	29·039	35·848	32·257
Exports.								
Foreign Countries, except China and Eastern Settlements ...	11·447	16·385	19·817	34·205	53·400	29·657	37·556	42·044
China and Eastern Settlements	7·898	8·893	11·960	13·655	12·981	12·203	14·412	14·192
TOTAL ...	19·345	25·278	31·777	47·860	66·381	41·860	51·968	56·236
Excess of Exports.								
Foreign Countries, except China and Eastern Settlements ...	1·196	3·182	—1·381	13·692	27·088	2·364	3·917	11·995
China and Eastern Settlements	6·603	7·624	10·207	11·536	10·995	10·457	12·203	11·984
TOTAL ..	7·799	10·806	8·826	25·228	38·083	12·821	16·120	23·979
II.—TREASURE.								
Imports.								
Foreign Countries, except China and Eastern Settlements ...	2·852	11·542	10·209	16·594	17·669	4·508	7·080	5·342
China and Eastern Settlements	1·667	2·301	3·492	3·915	5·959	8·729	6·386	2·923
TOTAL ...	4·519	13·843	13·701	20·509	23·628	13·237	13·466	8,265
Exports.								
Foreign Countries, except China and Eastern Settlements ...	·827	·612	·715	·988	1·549	2·388	1·441	1·448
China and Eastern Settlements	·226	·280	·135	·123	·077	·045	·042	·142
TOTAL ...	1·053	·892	·850	1·111	1·626	2·433	1·483	1·590
Excess of Imports.								
Foreign Countries, except China and Eastern Settlements ...	2 025	10·930	9·494	15·606	16·119	2·120	5·638	3·893
China and Eastern Settlements	1·441	2·021	3·357	3·792	5 881	8·685	6·344	2·781
TOTAL ...	3·466	12 951	12·851	19·398	22·000	10 803	11·982	6·674
Home Bills on India ...	3·371	1·614	·307	6·642	7·578	5·068	3·921	10·592
Guaranteed Railway Capital (net) paid into the Home Treasury ...	·715	1·743	4·508	3·374	2·503	2·771	4·621	1·248
Borrowed in England ...	1·199	1·660	7·337	...	1·662	2·732	1·379	2·625
TOTAL ...	5·285	5·047	12·152	10·016	11·743	10·571	9·921	14·465

TABLE

ANNUAL AVERAGE OF NET EXPORTS OF MERCHANDISE AND NET IMPORTS OF TREASURE, 1850-51 TO

	1850-51 to 1854-55, 5 years.	1855-56 to 1857-58, 3 years.	1858-59 to 1861-62, 4 years.	1862-63, 1 year.	1863-64 to 1865-66, 3 years.	1866-67, 1 year.
	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.	£ Millions.
China and Eastern Settlements—						
Excess of exports to (merchandise)	6·603	7·624	10·207	11·536	10·995	10·457
Excess of treasure imported over exported	1·441	2·021	3·357	3·792	5·881	8·684
	5·162	5·603	6·850	7·744	5·114	1·773
Foreign Countries, except China and Eastern Settlements—						
Excess of exports to (merchandise)	1·196	3·181	—1·381	13·692	27·087	2·364
	6·358	8·784	5·469	21·436	32·201	4·137
Foreign Countries, except China and Eastern Settlements—						
Treasure—Net imports ...	2·025	10·930	9·194	15·606	16·119	2·120
Home Bills on India ...	3·371	1·644	·307	6·642	7·578	5·068
	5·396	12·574	9·801	22·248	23·697	7·188
	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
Price of bar silver in London per ounce	60·4125	61·4583	61·4687	61·4375	61·2708	61·125
Exchange on Secretary of State's Bills on India, per rupee ..	$23\frac{39}{40}$	$24\frac{1}{4}$	Nominal	$23\frac{7}{8}$	$23\frac{5}{6}$	23
Total gold imported (net) ...	5·386	7·381	18·128	6·848	24·463	3·842
„ silver „ (net) ...	11·923	31·487	33·290	12·550	41·545	6·963
TOTAL ...	17·309	38·868	51·418	19·398	66·008	10·805
Annual average gold ...	1·077	2·460	4·532	6·848	8·154	3·842
„ „ silver ...	2·385	10·496	8·323	12·550	13·848	6·963
TOTAL ...	3·462	12·956	12·855	19·398	22·002	10·805
Total silver coined	18·994	30·304	29·483	9·251	36·343	6·119
Annual average	3·799	10·101	7·371	9·251	12·114	6·119

AND OF HOME BILLS ON INDIA, FOR GROUPS OF YEARS, IN THE PERIOD FROM 1873-74.

1867-68 and 1869, 2 years.	1869-70 and 1870-71, 2 years.	1871-72, 1 year.	1872-73 and 1874, 2 years.
£ Millions.	£ Millions.	£ Millions.	£ Millions.
12·203	11·418	13·773	11·656
6·344	4·272	2·572	1·393
5·859	7·146	11·201	10·263
3·917	9·313	18·329	11·511
9·776	16·459	29·530	21·774
5·638	3·797	7·526	2·175
3·921	7·712	10·310	13·613
9·559	11·509	17·836	15·788
Pence	Pence	Pence.	Pence.
60·53125	60·5	60·5	59·78125
23⅛	22 13/16	23⅛	22⅛
9·769	7·878	3·565	3·926
14·195	8·260	6·520	3·211
23·064	16·138	10·085	7·137
4·883	3·939	3·565	1·963
7·097	4·130	6·520	1·605
11·980	8·069	10·085	3·568
8·520	9·192	1·690	6·351
4·260	4·596	1·690	3·175

		For twelve years from 1850-51 to 1861-62.	For twelve years from 1862-63 to 1873-74.
...	...	30·895	A 60·291
...	...	76·700	A 93·244
...	...	107·595	153·535

Years.		Gold.	Silver.
4	A 1862-63 to 1865-66.	31·311	54·095
5	1866-67 to 1870-71.	21·489	29·418
3	1871-72 to 1873-74.	7·491	9·731
		60·291	93·244

TABLE

GOLD AND SILVER IMPORTS, EXPORTS, AND NET IMPORTS OF TREASURE IN THE COINAGE IN EACH YEAR

YEAR.	IMPORTS.			EXPORTS.		
	Gold.	Silver.	Total.	Gold.	Silver.	Total.
	£	£	£	£	£	£
1850-51 ...	1,155,310	2,656,498	3,811,808	2,016	539,273	541,289
1851-52 ...	1,338,778	3,713,280	5,052,058	71,165	847,923	919,088
1852-53 ...	1,341,106	5,490,227	6,851,333	168,805	885,203	1,054,008
1853-54 ...	1,078,708	3,770,643	4,849,351	17,265	1,464,899	1,482,164
1854-55 ...	882,721	1,145,137	2,027,858	151,431	1,115,537	1,266,968
	...	...	...	...	...	...
1855-56 ...	2,508,353	8,792,793	11,301,146	2,108	598,418	600,526
1856-57 ...	2,176,002	12,237,695	14,413,697	84,788	1,164,448	1,249,236
1857-58 ...	2,830,084	12,985,332	15,815,416	47,011	766,384	813,395
	...	...	...	...	...	...
1858-59 ...	4,437,339	8,379,692	12,817,031	10,686	651,350	662,236
1859-60 ...	4,286,037	12,068,926	16,356,963	3,803	921,363	925,166
1860-61 ...	4,242,441	6,434,636	10,677,077	9,872	1,106,627	1,116,499
1861-62 ...	5,190,432	9,761,545	14,951,977	6,007	675,089	681,096
	...	...	...	...	...	...
1862-63 ...	6,881,566	13,627,398	20,508,964	33,410	1,077,243	1,110,653
1863-64 ...	8,925,412	14,037,167	22,962,579	27,106	1,240,352	1,267,458
1864-65 ...	9,875,032	11,488,320	21,363,352	35,068	1,409,522	1,444,590
1865-66 ...	6,372,895	20,184,408	26,557,303	648,419	1,515,234	2,163,653
	...	...	..	...	...	...
1866-67 ...	4,581,472	8,655,432	13,236,904	739,143	1,692,360	2,431,503
1867-68 ...	4,775,924	6,999,450	11,775,374	166,457	1,405,489	1,571,946
1868-69 ...	5,176,976	9,978,978	15,155,954	17,624	1,377,956	1,395,580
	...	...	...	...	...	...
1869-70 ...	5,690,399	8,264,408	13,954,807	98,282	946,264	1,044,546
1870-71 ...	2,785,975	2,662,237	5,448,212	500,453	1,720,313	2,220,766
	...	...	...	...	...	...
1871-72 ...	3,573,778	8,007,525	11,581,303	8,434	1,487,209	1,495,643
1872-73 ...	2,622,371	1,934,214	4,556,585	79,009	1,219,070	1,298,079
1873-74 ...	1,648,807	4,143,726	5,792,533	266,169	1,647,902	1,914,071
	...	...	...	...	...	...
1874-75 ...	2,089,236	5,733,776	7,823,012	215,701	1,409,608	1,625,309

FOREIGN TRADE OF BRITISH INDIA, AND AMOUNT OF GOLD AND SILVER FROM 1850-51 TO 1874-75.

Net.			Coinage.		
Gold.	Silver.	Total.	Gold.	Silver.	Total.
£	£	£	£	£	£
1,153,294	2,117,225	3,270,519	123,717	2,616,417	2,740,134
1,267,613	2,865,357	4,132,970	62,553	4,248,491	4,311,044
1,172,301	4,605,024	5,777,325	...	5,509,965	5,509,965
1,061,443	2,305,744	3,367,187	145,679	5,253,437	5,399,116
731,290	29,600	760,890	2,676	1,365,901	1,368,577
5,385,941	11,922,950	17,308,891	334,625	18,994,211	19,328,836
2,506,245	8,194,375	10,700,620	167,863	6,973,659	7,141,522
2,091,214	11,073,247	13,164,461	128,302	10,779,286	10,907,588
2,783,073	12,218,948	15,002,021	43,783	12,551,303	12,595,086
7,380,532	31,486,570	38,867,102	339,948	30,304,248	30,644,196
4,426,453	7,728,342	12,154,795	132,273	6,542,267	6,674,540
4,284,234	11,147,563	15,431,797	64,307	10,677,924	10,742,231
4,232,569	5,328,009	9,560,578	65,038	5,192,328	5,257,366
5,184,425	9,086,456	14,270,881	58,667	7,070,830	7,129,497
18,127,681	33,290,370	51,418,051	320,285	29,483,349	29,803,634
6,848,156	12,550,155	19,398,311	130,666	9,251,468	9,382,134
8,898,306	12,796,815	21,695,121	54,354	11,477,425	11,531,779
9,839,964	10,078,798	19,918,762	95,672	10,358,423	10,454,095
5,724,476	18,669,174	24,393,650	17,665	14,507,049	14,524,714
24,462,746	41,544,787	66,007,533	167,691	36,342,897	36,510,588
3,842,329	6,963,072	10,805,401	27,725	6,118,857	6,146,582
4,609,467	5,593,961	10,203,428	21,534	4,313,285	4,334,819
5,159,352	8,601,022	13,760,374	25,156	4,207,031	4,232,187
9,768,819	14,194,983	23,963,802	46,690	8,520,316	8,567,006
5,592,117	7,318,144	12,910,261	78,510	7,473,560	7,552,070
2,285,522	941,924	3,227,446	4,143	1,718,197	1,722,340
7,877,639	8,260,068	16,137,707	82,653	9,191,757	9,274,410
3,565,344	6,520,316	10,085,660	15,412	1,690,394	1,705,804
2,543,362	715,144	3,258,506	31,795	3,980,972	4,012,767
1,382,638	2,495,824	3,878,462	15,498	2,370,007	2,385,505
3,926,000	3,210,968	7,136,968	47,293	6,350,979	6,398,272
1,873,535	4,324,168	6,197,703	14,034	4,896,884	4,910,918